This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

**Usage guidelines**

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

**About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

FA6615.389

TRANSFERRED TO
FINE ARTS LIBRARY

HARVARD COLLEGE
LIBRARY

BOUGHT WITH
MONEY RECEIVED FROM
LIBRARY FINES

TRANSFERRED TO
FINE ARTS LIBRARY

# WILSON'S

# PHOTOGRAPHIC MAGAZINE

EDITED BY EDWARD L. WILSON.

VOLUME XXXVIII.

NEW YORK:
EDWARD L. WILSON, PUBLISHER,
NO. 287 FOURTH AVENUE,
1901.

FA 6615.545

FA 6615.389

FF 16.00

HARVARD FINE ARTS LIBRARY
FOGG MUSEUM

WILLIAM J. DORNAN, PRINTER,
RITTENHOUSE BUILDING, 701-709 ARCH ST.,
PHILADELPHIA, PA.

# EMBELLISHMENTS.

*January.*—"The Friar." By C. W. HEARN, Boston, Mass. Copyright, 1900. Engravings from Photographs by HENRY H. PIERCE, ALFRED HOLDEN, B. J. FALK, PHILIP S. RYDER, F. M. SOMERS, C. A. ZIMMERMAN, REUTLINGER, and SCHLOSS. Landscape by H. C. MYERS.

*February.*—"An Unretouched Portrait." By J. W. WARD, Connellsville, Pa. Twenty-one Engravings from Photographs by W. M. HOLLINGER, WILLIAM GILL, PACH BROS., E. D. EVANS, and W. E. PARTRIDGE.

*March.*—"A Clever Example of Studio Portraiture." By WILLIAM GILL, Colchester, England. Engravings from Photographs by W. E. BUEHLER, HENRY H. PIERCE, EVAN D. EVANS, and H. C. MYERS.

*April.*—"The Bride." Engraved from a Platinotype Portrait by WILL ARMSTRONG, Boston, Mass. Supplement Engravings: Portraits and work of the Lens and Brush Club of Boston, Mass.

*May.*—"Pauline True Sperry." By GEO. B. SPERRY. Engravings from Photographs by LOUIS F. JANSEN, S. L. CASSAR, F. E. TURNER, and WINFIELD SCOTT.

*June.*—"The Cello Player." From a Platinotype by CHARLES P. MARSHALL, Cazenovia, N. Y. Engravings from Photographs by LOUIS WALKER, J. SCHLOSS, W. W. COWLES, A. N. CAMP, SCHREIBER BROS., and J. H. FIELD.

*July.*—"Mrs. James Brown Potter." By LANGFIER, New York.

*August.*—"Queen of Night." Engraved from a Portrait made by Gaslight. By LANGFIER, New York. Sixteen Engravings made from Portraits by LANGFIER.

*September.*—"Roses." From a Photograph by N. C. HAWKS, San Francisco, Cal. Portrait Supplements from Photographs by D. ROSSER, Studio, Pittsburg, Pennsylvania, and L. F. JANSEN, Buffalo, N. Y.

*October.*—A New Portrait Style and Eight Engraved Supplements from Photographs by FRANK G. SCHUMACHER, Los Angeles, Cal.

*November.*—"A Picture of Pathetic Interest." Engraved from a copyrighted Photograph by GEO. M. EDMONDSON, Cleveland, Ohio. Engraved Supplements from Photographs by D. ROSSER, LOUIS WALKER, PACH BROS., W. N. BRENNER, and the VAN LOO Studio.

*December.*—"Portrait of a Child." By PHILIP S. RYDER, Syracuse, N. Y. Eight Engraved Supplements by R. NEWELL & SONS, D. D. SPELLMAN, ISAAK DE VOS, DAN. L. JOHNSON, and the AMERICAN MUTOSCOPE CO.

NOTE.—The circular portrait of a child in the November issue, erroneously credited to D. Rosser, should be credited to its maker W. N. Brenner.—ED.

# ILLUSTRATIONS.

A full-page supplement is indicated by the name of the month.


ARMSTRONG, WILL, 113, 128

BRENNER, W. N.—June
Buehler, W. E.—March

CAMP, A. N.—June
Cassar, S. L.—May
Clark, E. W.—June
Core, W. F., 130, 132
Cowles, W. W.—June

EDMONDSON, George M., 417
Evans, E. D.—February and March

FALK, B. J.—January
Field, J. H.—June

GATCH, W. M., 133
Garo, J. H.—April
Geisler, Franz—April
Genoa, Campo Santo at, 49
Gill, William—February and March

HAWKS, N. C., 329
Hearn, Charles W.—January
Hewitt, Arthur, 258
Holden, Alfred—January and 170
Hollinger, W. M.—February

JANSEN LOUIS F.—May and September
Johnson, Dan L.—December
Johnstone, A. C. 55

KEMP, J. H., 89
Kupper—March

LANGFIER—July and August
Liberty, Cradle of—December
Luckhardt, Fritz, 135

MCKINLEY. The late President, 417
Marshall, Charles P., 193
Miller—December
Miniature Portrait, 55
Myers, Horace C.—January and March

NEWELL & SONS, R.—December

PACH BROS.—February and November
Parkinson, M. B.—April
Partridge, W. H.—February and April
Pierce, Henry H.—January, March, and April

REUTLINGER—January
Rosser, D.—November
Ryder, Philip S.—January and December

SCHLOSS, J.—January, February, and June
Scott, Winfield—May
Schreiber & Sons—June
Schumacher, F. C.—October
Somers, F. M.—January and June
Spellman, D. D.—December
Sperry, George B., 153
Star Theatre, N. Y., Destruction of—December
Statuary, Photographs of, 49
Strauss Studio, 249

THUSS BROS., 90
Todd F. Dundas—December
Turner, F. E.—May

VAN LOO Studio—November
Vos, I. de—December

WALDON, BISHOP, Portrait of, 130
Walker, Louis—June and November
Ward, J. W.—February and March
Wilson, Francis, Portrait of—January

ZIMMERMAN, CHARLES A.—January

# INDEX.


ACCESSORIES, living, 290
new, 274
studio, 294
Advertising, practical, 373, 377, 419
without printers' ink, 209
After-treatment of development papers, 165
of negatives, 119
Agfa intensifier, 105, 434
reducer, 397
Amateur side line, 173
Appearances in the studio, 198
Architecture, single lenses for, 445
Art effects in paper, 166
in photography, 218
Artificial light in photography, 126
Artistic photography for reproduction, 375
Artists, study of the work of well known, 91
Assistants, about, 388
Autopoze, the, 187

BACKGROUNDS, dark and simplicity, 195
Backing, antihalation, 191
plates, 269, 472
Baker Street, London, 73
Balance, 124
Biograph as a recorder, 470
Blakslee studio, the, 58
Blocking out, a method of, 431
Bottles, 191
Boudoir portrait, the, 42
Breadth in composition, 123
Bromide and other papers, 267
paper, 322
sepia tones on, 288
warm toned, 436
Bull, John, and his trade, 447
Business letters, 179
methods, 245
success, elements in, 447
the craving for, 424
the making of a big, 281
Button portraits, 175

CAMERA, the man behind the, 442
Capitol Camera Club Exhibition, Washington, D. C., 229
Carbon printing, essentials in, 133
Celebrities, pen pictures of, 175
Chemistry, practical for photographers, 359
Child portraiture, 398
Children, photographing, 33
professional portraits of, 99
Chips from a photographic workshop, 88
Clouds, 143
Color photography, pigmentary, 65
two methods of, 81
screen, when to use a, 321
Competition, American, 283
Composition, 121, 347
Contact copying of engravings, 172
Contrast, the law of, 123
Convention echoes from Detroit, 401
official report of the, 330
pictures at Detroit, 395
the Detroit, 60
the Iowa, 104
the National, Detroit, 193, 265, 329
the Nebraska, 273
the Pennsylvania, 217
the Wisconsin, 187
Cope, Edward, 110
Copies, "working" up for, 386
Copying glass positives, 25
Copyright case, an important English, 412
League? how shall we vitalize the, 2
the Photographers', 104
photographic, 92
Corona, recent methods of photographing the sun's, 277
Criticism of pictures, 365
Cut glass to photograph, 3

DAGUERREOTYPES, 376
Dampness, 162
Dark-room, development of a, 389
illuminants, 399
hints for, 411
light, 166
Daylight enlarging, practical notes on, 115
Density, on judging, 163
Depth: an elementary chapter on optics, 211
Detroit Convention, the, 60
Developer, a metol-hydro, 176
Developing formulæ for Lovell plates, 449
Development, a point in, 216
false ideas concerning, 78
papers, after-treatment of, 165
temperature in, 25
Diaphragms and their notation, 420
Doctoring flat negatives, 47
Dogs, photographing, 161
Dress and drapery in photography, 323

EASTMAN'S, Mr., generous gift to Rochester, 114
Editor's table, 32, 72, 108, 152, 192, 231, 279, 328, 416, 456, 487
Effects, novel, 153
Engraved glass, to photograph, 3
Engravings, contact coying of, 172
Enjoy pictures, how to, 7
Enlarged negatives, 142, 184
Enlarging films, 46
practical notes on daylight, 115
with magnesium ribbon, 127
Enlargements direct in warm tones, 234
Essentials in carbon printing, 133
Etching ground glass screens, 48
Exhibition of The Capitol Camera Club, 229
Exposures, short, 228
Expression, 6

FABRICS, printing on, 9
Few lens facts, 35
Figures, pictures with, 43, 478
Film engraving, 46
Films, 22, 46
Fixed? when is a plate, 94
Flashlight portraiture, 103
Flat negatives, doctoring, 47
Focus, depth of, 462
Focusing screens, 48
with the lens, 296
Forman, Israel, 32
Fraternity, the value of, 113, 226

GALLERY, how to manage a, 366
Gennert, Gottlieb, 149
Genre portraiture, 145
Glasgow photographers, 380
Glass, photographing engraved, 3
positives, copying, 24
Ground-glass screens, 48
Gum ozotype, 155

HASTE, 291
Hints and gossip, 426
Hollinger's singe print method, 97
How to enjoy pictures, 7

ILLUMINANTS, dark-room, 399
Imogen, 70
Impurities in water, 139
Ink for writing on glass, 176
Intensification and reduction by cupric bromide, 158
and reduction, new methods of, 240
Intensifier, agfa, 105, 434
Intensifying without mercury, 151
Interior photography, 270
Iowa Convention, 104
Ivory, printing on, 108

JAPANESE school of photography, 67
Journalistic instinct, 140

KALLITYPE method, postcards by the, 157

LABOR, organization of photographic, 40
Langfier, portraitist, 313
Lantern slides, 216
by contact, copying, 216
showing stereoscopic relief, 431
warm-toned, 427
Latent image, 65
Leaky studio, a remedy for a, 48
Lens and Brush Club, 129
facts, a few, 35, 462
Lenses, new, 422
of the future, 67
short, long, and medium focus, 285
single for architecture, 445
supplementary, 127
Light and shade, 14
in photography, 200
new for portraiture, 197
the dark-room, 166, 296
Lighting notes, 154
Likeness taking, on, 196
Living, saving a, 404
London Photographic Salon, 409
Lovell plates, developing formulæ for use with, 449

MACDONALD, PIRIE, 59
Machinery, photographing, 289
Magazine, the 1901, 1
Magnesium, enlarging with, 127
Man behind the camera, 442
Marceau, Theo., 58
Metallic spots in prints, 59, 102
Mezzotints, 431
Miniatures, 127, 406, 437, 471
Mount, the photograph and its, 261
Mounting, about, 435
photographs, a method of, 441
on glass, 326
Mounts, the professional uses, 62
Mosaics, 1901, practical points from, 26
Movement, a suggested upward, 83
Morton's studio, opening of, 103

NATIONAL Association and Convention, 60, 71, 193
Naturalness, 77
Nebraska Association, 69
Convention, 273
New England Photographers' Association, 239, 393
News and notes, 16, 47, 102, 127, 191, 415
from the craft, 58, 207
Negative retouching in America, 134
Negatives, enlarged, 142, 184
exhibition of historical, 139
mending cracked, 151
reversed, 45
a method of making, 48
Novel effects, 153
Notes, curious and interesting, 295, 376, 431

OBITUARY, 149
Observation, 85
Oklahoma Convention, 464
Opal photographs, 57
Opals on thin metal plates, 103
Opening, an attractive, 103
Organization of photographic labor, 40
Orthochromatic plates, 148
Our picture, 31, 54, 89, 169
Outdoor work, composition in, 120
plates for, 263
Ozotype, 17, 155
gum, 155

PACH, A. L., 59
Papers, bromide and other, 267
Pennsylvania Convention, 217
prize list, 95
Permanency, 275
of sepia platinums, 36
Pictorial photography, 204
composition in outdoor work, 120
Picture of pathetic interest, a, 434
Pictures at Detroit Convention, 395
how to enjoy, 7, 225
our, 31, 54, 89, 169
that live, 345
with figures, 43
Pigmentary color photography, 65
Pinhole photography, 48
Philadelphia Photographic Salon, 1901, 264, 488
Photograph and its mount, the, 261
who controls one's, 405
Photographer's gossip, 237
Photographers' Association of the Pacific Northwest, 273
Glasgow, 380

Photographers, to safeguard the interests of, 178
Photographic labor, organization of, 40
philosophy, 438
portraiture as an art, 233
postcards by kallitype method, 157
Photographing children, 33
dogs, 161
machinery, 289
statuary, 49
Photography, 4
as a profession, 131
at customers' homes, 177
at St. Louis World's Fair, 314
interior, 270
new century, 65
two methods of color, 8 1
Plain paper, 10
Plate, when is it fixed? 94
Plates for outdoor work, 263
speed of, 80
Platinotype defects and their remedy, 451
prints, finishing, 316
Platinotypes, fixing, 452
Platinum paper, permanency of, 443
various tones on, 120
Portrait, boudoir, 42
Portraits, buttons, 175
of children, professional, 99
Portraiture, 257
American professional, 417
child, 398, 454
genre, 145
suggestions on, 87
Posing men, a few hints on, 247
Positives, copying glass, 24
Practical, on being, 37
points from "Mosaics," 26
Prices and quality, 423
selling, 369
Print, the single, 38
Printing dodge, a, 327
on silk, 8
Professional Photographers Association of New England, 239
photography, not portraiture, 293
American, 318
Public buildings, photographing, 16
Pyro, 147

READING and taking note, 21
Record, photography as a means of, 68
Reducer, agfa, 397
a new, 287
Reproducing famous paintings by photography, 409
Reproduction, artistic photography for, 375
Retoucher, how to help the, 170
Retouching medium, a good, 191
Reversed negatives in practice, 45, 48
Robinson, Henry Peach, 150
Rules for pictorial composition, 125

ST. LOUIS World's Fair, photography at the, 314
Salon, Philadelphia Photographic, 264, 488
Self-reliance, 385
Selling prices, 369
Sensitizer, a simple, 16
Sepia tones on bromide paper, 288
Shade, light and, 14
Shutter speeds, 376
Silk, printing on, 8
Single print, 38
and Hollinger's method, 97
Sitter, the, 256
Skylight, under the, 284
Snow photography by night, 453
Softness in portraits, to obtain, 102
Sodium sulphite, 190
Solutions, strength and use of, 137
Special line, a, 185
Speed of plates, 80
Spellman, portraits by, 474
Spotting negatives, 159
Stained fingers, 48
Stains, to remove silver, from negatives, 141
Statuary, photographing, 49
Stebbins' studio, 58
Stops in lenses, 44
Strauss studio, 28, 59, 249, 458
Studio accessories, 294
appearances in the, 198
inside the, 315
practical points from the, 441
the Van Loo, 433
Studios, my experience in twelve, 355
Subordination in composition, 122
Sunlight effects, 117

TACT, 183
Temperature in development, 25
Thoughts, critical and artistic, 106
Todd, F. D., 476
Tones on platinum paper, 120
Trade bringer, a, 180
paper, a, 47
Transposing formulæ, 181
Trays, large sized, 166
to withstand acids, 151
Trimming prints with cut-out forms, 102

UNAR lens, the, 64
Underground photography, 31
Unity in composition, 122

VALUE of fraternity, 113
Van Loo studio, the, 433
Varnish, brilliant black, 191
for prints, 151
retouching, 437
Velox developer, a, 415
paper, the reduction of, 30
Vignette, the, 371

WATER, 107
common impurities in, 139
Willard, J. W., 108
Wisconsin Convention, 187

31 Oct. 35
FA6615.5
E. L.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 529.
JANUARY, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.

THE MAGAZINE FOR 1901 . . . 1
HOW SHALL WE VITALIZE THE COPYRIGHT LEAGUE? . . . 2
PHOTOGRAPHY. By Eva Lawrence Watson . . . 4
EXPRESSION. By Gustine L. Hurd . . . 6
HOW TO ENJOY PICTURES . . . 7
PRINTING ON SILK . . . 8
PLAIN PAPER. By Charles E. Fairman . . . 10
LIGHT AND SHADE . . . 14
NEWS AND NOTES . . . 16
OZOTYPE. By G. F. Blackmore . . . 17
ABOUT READING AND TAKING NOTE . . . 21
FILMS. By A. L. Henderson . . . 22
COPYING GLASS POSITIVES . . . 24
TEMPERATURE IN DEVELOPMENT . . . 25
PRACTICAL POINTS FROM "MOSAICS, 1901" . . . 26
AT THE STRAUSS STUDIO . . . 28
THE REDUCTION OF VELOX PAPER. By Dr. Lionel M. Homburger . . . 30
OUR PICTURE . . . 31
EDITOR'S TABLE . . . 32

OUR PICTURES:

"The Friar." From a copyrighted picture by Charles W. Hearn, Boston.
Sixteen Engravings from Photographs by Henry H. Pierce, Schloss, Ryder and others.

EDWARD L. WILSON,
289 FOURTH AVE: NEW YORK.

ENTERED AT N. Y. POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY
Fine money


# In 1901

# WILSON'S PHOTOGRAPHIC MAGAZINE

Will give its subscribers more practical instruction, more reliable information, and more fine engravings from the best work of American and foreign studios than any other photographic journal published here or abroad.

In "Wilson's" for 1901 the photographer will find, month by month, the best pictures, the most useful articles, the latest news and the most practical gathering together of whatever is new and desirable in the photographic world.

Every progressive photographer should see "WILSON'S" regularly. It is the acknowledged leader among American photographic magazines. A specimen copy will be sent for ten cents to those who mention this advertisement.

**Current Number, 30 cents**
**Per Year, $3; 6 Months, $1.50; 4 Months, $1**

**Send $5 for "Wilson's" for 1901, a copy of "Mosaics" 1901, and "How to Enjoy Pictures"**

**EDWARD L. WILSON**
**289 Fourth Ave., New York**

THE FRIAR

Copyright 1900 by Chas. W. Hearn, Boston

*Exhibited at the New England Salon, 1900*

# WILSON'S

# PHOTOGRAPHIC M[illegible]

[illegible]

[illegible]

## THE MAGAZINE [illegible]

[illegible]

[illegible]

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. JANUARY, 1901. No. 529.

## THE MAGAZINE FOR 1901.

As the more discerning of our readers have doubtless observed, we have celebrated the incoming of the New Century by several desirable improvements in the typographical make-up of the MAGAZINE. A new, clear face of type has been used throughout, the titles of our contributed papers are set in a bolder type, which gives them greater distinctness, and we have had made new and better paper-stock both for text and illustration pages, all of which must surely add to the pleasure our readers have in the perusal of "WILSON'S."

That the features of the MAGAZINE, its aims and practical character are fully appreciated has been abundantly shown of late by the gratifying increase in the number of our subscribers. One result of this increased support is seen in the changes here apparent. The making of a technical journal is a work which requires liberal expenditures, and hence the larger the income from the MAGAZINE, so much the more can be returned to its subscribers.

We have arranged a very attractive programme for the year, the features of which will be unfolded month by month. Briefly this programme means that "WILSON'S" will be more than ever the best and most useful journal published for practical photographers. It is our aim to make "WILSON'S" the one journal which shall properly represent American professional photography at its best, shall protect its interests, and keep the fraternity well informed concerning whatever is interesting or of importance. This is no light task. It involves more labor than our readers can readily appreciate, and necessitates expenditures which can only be provided for by the generous co-operation of those for whom the work is done.

In this, the first issue of the new volume, the reader has a fairly representative example of what we believe a professional journal should be. But we want to make it still better, still more interesting and more helpful. Lend us your practical help. Renew your subscription promptly —which means *to-day*, and send, wherever possible, a new subscription with your own. We want every American photographer upon our list, and those who help us to attain this purpose will not find us lacking in appreciation.

## HOW SHALL WE VITALIZE THE COPYRIGHT LEAGUE?

In skill, versatility and artistic enthusiasm for the beauty and dignity of his art the American photographer has few peers and no superiors. He has been, still is, and will inevitably continue to be, one of the most important factors in that increasing knowledge and appreciation of art which, in all its multifarious phases, lightens and glorifies the incoming of the twentieth century.

With this development of tasteful effort and skilled procedure there has been, naturally enough, a corresponding and broadening perception of its commercial possibilities — in all directions but one; that one, certainly as important as any, yet treated with a curiously inexplicable apathy by most of those who are most concerned, is the matter of copyright.

The average photographer is, as a rule, keenly watchful of his business opportunities and alert to take advantage of them. How, then, are we to explain his curious obtuseness to the fact that his personal interests are as much involved as anyone's in the work which the Copyright League is aiming to accomplish?

Here is the matter in a nutshell. There has never been any time when photographic reproduction was more in use. It is the most artistic stand-by of the monthly magazines and the daily papers, the novelty manufacturers, and the job printers—in fact, in a thousand ways, photographs are now being turned to practical account for illustrative, advertising, and similar purposes. And everyone who handles it gets his share of profit out of it—except, as a rule, the man who made the picture. He generally "gets left." Why should he?

If you make a picture which some one wishes to use for a magazine, calendar, or a novelty button, why should they not pay for it—and why should not the pay come to *you?* Would not a legitimate royalty look as well in your bank account as the next man's? There are some men—and I am one of them—who think it looks much prettier there than elsewhere.

Here is a little argument used by Mr. Joseph J. Elliott, the well-known English photographer. His interest lies largely in the figures he uses. There are times when figures form a very convincing argument—and this is one of the times. Over in England they have a Photographic Copyright Union, of which Mr. Elliott was the founder. This is the "meat" of a letter written by him to Mr. B. J. Falk:

"We met great opposition from the press in the first years of its existence, but by continuous fighting and winning some good actions we meet now with no serious opposition. Whenever a newspaper or magazine proprietor or other person wishes to reproduce a copyright photograph he first applies to the proprietor for permission to do so, and pays a minimum fee of half a guinea; if to be reproduced large size, or if it be an important subject, he pays from one guinea to ten guineas for the privilege, though 10*s.* 6*d.* is the usual fee.

"The following figures will show you that I have done exceptionally well the first half year with copyright fees:

| | |
|---|---|
| January, 1900 | £294 |
| February, " | 276 |
| March, " | 502 |
| April, " | 289 |
| May, " | 360 |
| June, " | 283 |
| | £2004 |

From the above you will see that I have made just over £2000 by my copyrights in six months. Of course, this is partly due to the war in South Africa. I have the best series of generals and war portraits extant, and I have made about £500 by one portrait alone, that of Major-General Baden-Powell, which has been reproduced in every conceivable way for advertising and otherwise."

Mr. Elliott expresses himself as being "very well contented with the existing state of affairs," but a new bill is now before the House of Lords which is framed upon more favorable lines. In this the term of copyright is for the life of the photographer and for thirty years after death. The photographer is proprietor of the copyright, whether paid for taking the picture or not, only in the case of payment the photographer cannot make use of the photograph in any way without the consent of

the person who gives the commission, until after his death. But the principal feature in favor of the photographer is that it does away entirely with registration—the bill is a model of conciseness and simplicity. It has been read a second time in the Upper House, and has been sent to Canada and Australia for the approval of the Colonies, and there is every prospect of its becoming a law next year.

Why cannot we have as full and profitable protection in this country? We can if we will; but it cannot be hoped for while the bulk of the profession are content to stand idle and let the heat and burden of the battle fall upon a zealous few.

What action should be taken to ensure the most effective results? In my own opinion success can only be achieved upon some such lines as the following:

I think that success could be ensured if the League be properly supported. As one means to that end a number—say anywhere from twenty-five to fifty—of those who would be most directly benefited should band themselves together and agree to pay a *pro rata* sum toward a fund.

This fund should be sufficient to ensure the services of a capable energetic business man, whose task it should be to keep in touch and regular communication with the profession in every section of the country. He should see to it that never a month passes without a letter urging their aid and co-operation. Every photographer in the country should be enlisted in the cause, and he should see that they have no opportunity of forgetting it.

They should be urged to not only join the League, but give further aid by keeping in touch with their Congressmen, as well as giving, whenever possible, financial assistance toward keeping up the good work at Washington, where the representatives of the League are working to secure the passage of a good protective copyright law.

He should, also, keep in constant touch with the Washington end of affairs, as well as the officers of the League.

This latter consideration brings up another point which should, I think, be taken into account. That is, that the officers of the League are, as a rule, too far apart for effectively concerted action. When they are scattered in widely different parts of the country—Brooklyn, Chicago, Philadelphia, and Milwaukee—they surely have no opportunity for personal conference more than once a year or so, and so it may frequently happen that some advantage that might be gained by prompt action is lost on account of the delay incurred by correspondence by mail. Before the matter is properly discussed and a conclusion arrived at the opportunity has passed. The firing is at too long a range.

That as many sections as possible should be officially represented is advisable, but the President and Secretary, at least, should be within easy reach of each other, and I think it would be distinctly advantageous to keep this in view.

The one thing that should be borne in mind by those who have been hitherto negligent in this matter is, that this is a matter involving both equity and hard cash. As matters now stand the maker of a picture that has any public interest is practically helpless in the face of constant injustice. It is to correct this injustice that the Photographic Copyright League is working. It is fighting for the honor and profit of every photographer in the country. That means *you*.

If you realize this as forcibly as you should, come into the fold by joining the League. Send your name and address, with a request for enrollment, to Mr. Charles E. Bolles, 244 Fulton Street, Brooklyn, N. Y.

If you can do more than that, all the better; but even your name will count for something. Every photographer in the country should be with us, not merely as a matter of general principle, but as a matter of self-interest. So I want every member of the profession who reads this to bear in mind that Mr. Bolles wants to hear from him—not to-morrow, or presently, or by-and-by, but right now.

S. L. STEIN.

MILWAUKEE.

---

IN photographing finely-cut or engraved glass, dust over any frosted or figured parts with chalk or some white powder to increase the contrast. Dust the chalk from the clear parts. If a flat dish be the subject use a pink background. If a dish or bowl, fill it with water made slightly red with a few drops of red ink or dye.

# PHOTOGRAPHY.*

BY EVA LAWRENCE WATSON.

THERE are probably no words less understood and more misused than *art* and *artistic*. It is the common use, when a thing is vague, unintelligible, affected, or in some way false, to call it artistic. Much that is ingenious and skilful craft is called art. It would be difficult if not needless to make a new definition of art. Tolstoi has rehearsed in his book on the subject all the varying opinions and definitions, and his own expression is the simplest and most comprehensive that I know. So that whether art is intellectual or spiritual, beautiful and ugly both, immoral as well as moral, one element in us it must appeal to—the imagination. And it is for this reason that photography has had to develop methods of avoiding the weakness and monotony of its mechanical reproduction of everything within range of the lens—of concentrating the interest in order to provide a new means for making pictures which could rightly be called artistic. The question has never been what is or what is not artistic, but whether photography was plastic enough to produce artistic results, and that has been sufficiently proven to discount the prophecies of failure from the unhopeful and the amusing condemnations of the ignorant.

There is no authority on art to whom to refer for judgment. If through a picture you can give to one other person the feeling which impelled you to make it you have done well, you have found recognition, and if one understands another will, and another in the course of time. The best things do not meet with general instant recognition.

Photography bears a resemblance to nature in this—the enormous amount of material thrown broadcast on the world, very little of which is fit or expected to survive. An immense lot of energy and stuff are apparently wasted in order that there may be a very special choice as the evolution of the creature goes on. It has been very easy to make numberless photographs without thought, but what now is required is special skill, endless patience, and more knowledge and study than most of us have been able to obtain. Then perhaps a master would be able to make two or three pictures and several portraits in a year which would be worthy to live as works of art. I am speaking very seriously of great works. Sketches and studies are part of the daily exercise of picture-makers, and much material, interesting and profitable to look at, can be shown which need not be mistaken for masterpieces nor shown as such.

We are suffering just now—we always have been—from influences, and, though the influences are better than they used to be, the disposition to imitate proclaims that photography still is young. Perhaps in its youth it could not do better than to imitate good things, but I think it could. It could do better by studying them. The painters enjoy some of our "painty" effects, and misunderstand others. They recognize our imitations, but hurt us by identifying our small resemblances with with schools of painting, ignoring our identity, calling a strongly-lighted subject a Rembrandt, a hand and glove means Titian, a long, sweeping line indicates Alexander. Prints are classified as Corots or Constables, Whistlers or Holbeins, and we've been feeling flattered—in one sense we should—but it is a false compliment. In spite of all this the individuality of the man is claiming recognition. This is acknowledged on every side. The personality of the photographer is felt in the trivial French character of Puyo's prints, in the strong awkward compositions of the Hoffmeisters, and above all the supreme evidence of personality is seen by reflection, for instance Mr. White's influence so unmistakably stamped on the charming prints by Mr. Edminston shown in this year's Salon. This personality is not to be worked for; it is the inevitable sign of

* A paper read before the Photographic Society of Philadelphia.

Miss Watson, we may mention, is a woman worker who has during the past two or three years pursued professional photography in Philadelphia with more than ordinary success. Her work is marked by a distinct and pleasing individuality, and she combines pictorial effect with likeness in an altogether satisfactory way.—ED. W. P. M.

life, the unconscious expression of the man in his work. We look at pictures on the exhibition wall, a Dyer, a Eugene, or a Steichen, and feel the personality of the man through his special feeling or the shape of his idea, and far from our thoughts is the question of whether it is a Voigtlander lens, Seeds 27x plate, platinum, or gum-bichromate print.

Any means that is photographic should be used; the skill of the hand in manipulating plates and prints is not illegitimate. Foreign methods, such as working up in water color, are destructive of the purity of the art, as the introduction of gems and tinsel into painting and sculpture, and foreign phrases into a piece of English literature, are acknowledgments of unskilfulness or the disinclination to work.

There is an idea about that we see as the lens does. It is a very great mistake; we do not, either mentally or physically. The eye cannot focus on more than one spot. The lens focuses on one entire plane, and with persuasion can be forced to give equal sharpness to everything within its range, from the distant horizon to the near foreground. The difficulty of avoiding this stupid and uninteresting aspect of things is probably the reason why there has been more successful in-door than out-door work, although that is due partly to the fact that the light at least can be concentrated in an enclosure. A feeble admission of this difficulty in mechanical photographs is the usual habit of dragging a figure into a landscape which has no sympathy with it, with the firm conviction that it "introduces life," as they say, into something thus acknowledged to be dead. The only reason the figure introduced draws attention from the general monotony is that it is an intrusion, usually a self-conscious one.

I do not mean to say that the in-door work is better than the out-door work—that is, pure landscape, but there is more good work in which figures are used. I am compelled to say that the worst things done in photography have been with figures, deliberately planned, posed, and exhibited as "artistic." The deadly self-consciousness of models, the unfitness of objects and clothes used, and the poverty of imagination on the part of the man behind the camera, gives one a sense that one sees a straight photograph of a tableau, a living-picture arrangement, or the misfits of the grand opera choruses with calcium lights. A painter said to his pupils: "Art is an animal not to be caught by detail." The idea is good enough to be remembered by photographic students. Perhaps the commonplaceness of many photographs is mainly due to the absence of any definite intention at the start. We soak our plates and our paper, but we do not soak ourselves enough in our subject. We should follow up a picture, visit it often in many lights and seasons, carrying it about in our memory to its final completion. We may over-expose our plates, but we cannot get too strong a mental impression. It is good practice to *sketch* with the camera, using no plates, but studying on the ground-glass, becoming familiar with the disposition of our lens; so that it may not surprise us, finding out and avoiding what is impossible while it is impossible, studying how to work the camera to get our point of view, as well as to adjust our eyes to the lens as to new spectacles.

A photographer needs a special training for quickness of perception. It is his advantage to be able to retain by instant exposure of a plate some things which could not or would not enter his mind to conceive, and to do this his judgment and keenness must be constantly under his control. We cannot afford to lose the suggestions of the *happenings*, which, like the conjunctions of some planets, a man may be able to see only once in his life, and in instances where it is some line of beauty, or some expression or sentiment, or intense feeling, there is no way of repeating the effect. But the camera can catch it if the man recognizes what he wants, and by his memory he can work the material into rare pictures. Such material is, like nuggets of gold, likely to contain much dross because stuff is there which also happens and is not by choice, and the royal right of elimination must be used to dispose of whatever detracts from the value of the thing. Good judgment and a sense of abstract beauty, the realization of the embodiment of ideas in forms and lines, in light and sound, make that quality called "feeling," which is the personality, the "temperament" of an artist, a painter, photographer, writer, or musician.

When it becomes better understood that many false effects gotten photographically can be controlled by the skill of the photographer, more people will gladly turn to it as a worthy means of expressing their ideas and impressions, and we shall have schools of photography to teach composition and the relation of tone to color as well as the use of the camera and chemicals and manipulation of prints.

There is one open field yet very little touched by the camera, that is illustration, and I look for great things in that direction in the future. Some good work, but little, has been already done. At present there is something like reciprocity between the picture-maker and the poets, and in getting titles for pictures it is a question whether the Greek poet conveniently conceived characters which we recognize in our reincarnations, or whether he is the inspiration of our creations.

The opposition through which this new art is pushing itself—the traditions, like the earth which lies above the bursting seed through which it has to force its way—is a great and beneficial discipline, developing strength and brushing off whatever is superfluous or weak. So much the better if progress is slow. For a last word I would like to quote Mr. Steichen in a recent "brave" and refreshing criticism: "The goal for which we are working is still far, far away, and it seems that each and every man needs contribute toward the element which is to reach it and which each and every worker believes eventually will, or at least should, be reached."

## EXPRESSION.

BY GUSTINE L. HURD.

Of all the various requisites to be a successful photographer in portraiture nothing is more fundamental than expression. I refer to those who are seeking a legitimate likeness, and not to that other class who are in quest of something that looks as they would like to look. These latter persons are far more concerned about having a picture stylish and spirited, with a certain air, and mounted in accordance with the latest fad. But to those who wish a portrait—something that expresses them with that fidelity and accuracy that only a photograph can—the expression is a matter of the first consideration. No matter how artistic the posing and lighting, or how faultless the technique, if the expression of the face is constrained, or shows great depression or a forced smile, our labor is in vain, and ought to be. This difficulty may not be easy to overcome, and in some cases it may be impossible, but we have hardly done our duty to our sitter until we have put forth our best efforts. After having done our best in the way of handling, it may not conduce to great enthusiasm to begin over again and expose plate after plate for an indefinite time to secure the desired expression. If I could write a formula to bring about this result I should be doing the greatest possible service to photographers everywhere; but I can only make a few suggestions which I am afraid can hardly be considered as casting any new light.

If a sitter comes by appointment it may be that something has gone wrong at home or elsewhere which has caused great anxiety and distress, and the condition of mind is fully revealed by the face; or a headache or some bodily ailment is present; or perhaps a great rush of affairs that day has left the person exhausted and flushed. Now the sitter makes a merit of keeping his or her appointment, and leaves all to the photographer. The case is hopeless from the start, and it seems to me that it is far better to renew the appointment and to seek to impress upon your patron that there are conditions necessary to success, and that even the skill of a photographer cannot prevail against the operation of the laws of nature. Ordinarily much can be done by tact—by conversation that interests the subject, mixed with a little judicious compliment, and, above all, by not fussing too much about the pose, especially at the outset. It also seems to me that the shortest exposures are not always the most favorable to the securing of the best expressions.

With the person who sits but infrequently there is apt to be quite a little tension of the muscles of the face at the instant of exposure, and one that is somewhat prolonged allows the face to settle into a more natural state and often results more favorably. A little deception may sometimes be employed to great advantage. Make several mock exposures—using no plate at all—and if your sitter came into the operating-room a little nervous or constrained it is surprising how much more natural and at ease he or she will be when they think the worst is over, and you are really ready to begin your work.

Of course, all this applies only to work deliberately done and with a view to securing the best results. It seems to me that photographers attach too little importance to the expression when to the patron it overshadows everything else.—*Anthony's International Annual for 1901.*

## HOW TO ENJOY PICTURES.

THERE is no photographer in so helpless a case as he who is utterly self-satisfied with his own work. Such a man can neither learn nor hold; he cannot advance, and so slips behind the times. And his blindness prevents him seeing the fault in himself, and he curses the world and loses money, and at the last he closes his studio and drifts up and down Fifth Avenue, still as blind as ever and asking an absurd price for his services as operator. The man who advances is the man who knows the work that others are doing, and appreciates it.

Photography is two sided—it is technical and artistic. In the past there have been so many difficulties in photography that the man who attained to perfection of technique was reasonably and pardonably proud.

Since the technical end of photography has become fairly easy men have turned more to the expression of that many-phased reality called art, and they have found that art is a very real thing in the hands of many. When we say a real thing we mean that a steady persistence in hunting after the real meaning of art has raised men from work at $3 a dozen to work at $10 a dozen. A few years ago Ohio woke up to the possibilities of art, and many enthusiastic workers put in solid hours of study, poring over art rules until somehow they blundered through into art *feeling*, and found themselves possessed of a new sense, an intuitive feeling for beauty. Now several of them are making big headway in New York; others, as Minns, have gone to Chicago and other cities; Brenner took hold of and upheld a great reputation in Cincinnati, and, best of all, the general average of Ohio has been raised until now it is in many ways the banner State of the Union. How have the Ohio men (boys, we ought to say) done this? Many of them scarcely know; certain it is that few of them know any fixed rules such as we used to learn at school in connection with spelling or arithmetic. But somehow the art has soaked into them, or has influenced them, and a better class of work is the result.

There is no greater mistake than to think that work can be materially improved by the adoption of any fixed series of rules; all rules must be tempered with some exceptions and with much experience.

Very few busy men can specialize on more than one subject, and that subject must be their daily occupation; but all men can widen their knowledge and appreciation without becoming specialists. It was to widen this appreciation that we urged, almost two years ago, that photographers read and study Miss Emery's book, *How to Enjoy Pictures*, a book as interesting as a novel and as enlightening as an education. In speaking of the pleasure to be obtained from studying pictures, and of the ease with which they may be studied through cheap prints, Miss Emery says: "It is not in the least necessary for most of us to become judges and critics. What is heartily to be desired is that we shall all learn a larger measure of appreciation. We should study great pictures as we study great books—not for the purpose of being able to pass learned criticisms upon them, but for the purpose of appropriating and enjoying our share of whatever they have to give us. The knowledge of great pictures

which can be obtained from such illustrations—often reproductions of reproductions—is necessarily superficial in a certain sense, but it by no means follows that such knowledge is not worth having. 'A little learning' is not a dangerous thing unless its possessor mistakes it or tries to pass it off for great learning. In these days, when any serious kind of labor calls for unstinted devotion of the worker's time and strength, it is evidently impracticable for average busy people to make any thorough study of many subjects outside of the routine of their required work. One is consequently often reduced to choice between slight knowledge and none at all; and, in the case of picture study, where a very little increase of sympathetic understanding enlarges so much our resources of happy imagination, there can be no question that a little is better than nothing."

*How to Enjoy Pictures* is a book replete alike with suggestive thought and with solid information. The plan followed is to analyze and discuss certain well-known or commendable pictures, reproductions being in each case given. The teaching is thus of a definite character. The pictures are discussed in a clear, understandable manner, and the reader finds himself noting and understanding line, pose, masses, composition, and the many things that he too frequently is unacquainted with. All classes of subjects are touched on, and whether dealing with portraiture or with subjects of less direct interest to the professional, the instruction is well worth study. The book is divided into chapters, dealing with the Enjoyment of Pictures, Landscapes, Buildings and Street Scenes, Pictures that Tell a Story, Animals, Portraits, Studies of Life and Character, Illustrations of Legend and Fancy, Pictures with Religious Themes, the Pages of a Magazine, and Pictures in a School-room. There is also a chapter dealing with the various methods of the reproduction of pictures.

More than fifty pictures are reproduced and discussed in detail. They include examples by Dutch, Flemish, Italian, Spanish, French, Swiss, Austrian, German, English, and American artists. As one reads the discussions and studies the accompanying pictures, the artist's motive and the artist's skill are laid bare. We see equally the meaning and the technical means by which it has been attained. It may be a graceful arrangement of the hands, it may be the spacing, or it may be merely the thickening of some line in a pen-and-ink drawing; but whatever it is, it shows some premeditated design on the part of the artist.

When we first read *How to Enjoy Pictures* we found in it a book not to be read, but to be *studied*, and we pushed it prominently before our readers, not as a business matter, but as a means of advancing the craft. Hundreds of our readers got the book, and have learned much from it. To those who have not yet done so we urge that they delay no longer. Twelve months ago we suggested to all photographers that they remember themselves with a New Year's gift. When they—that is you—send your renewal for WILSON'S and get *Mosaics*, take advantage of the chance and obtain *How to Enjoy Pictures* and a liberal education. Send a straight $5 and obtain both books and the MAGAZINE for 1901. The three work well as a course of study, supplementing and illusttating each other.

## PRINTING ON SILK.

[STRAYED away among the solemn "Ex Cathedra" columns of a recent *British Journal of Photography* we find the following suggestive and practical notes about printing on silk. This is an alluring subject, and one about which we are often consulted by photographers in search of profitable novelties. The method here outlined is simple. Why should not some enterprising reader take it up and utilize it to brighten up his show-window or reception-rooms? Among the ornaments of Mr. Falk's wonderful Waldorf-Astoria reception-room are a few cushions most daintily covered with photographs on silk, and such embellishments are appropriate to the place as well as beautiful to the eye.—EDITOR W. P. M.]

Considering the great beauty of the results possible of achievement by utilizing

silk as a printing medium in photography, it seems strange that this and other kindred materials are not more largely employed. With the uninitiated, no doubt, there is an opinion that to produce photographs on silk means the employment of some peculiar process which differs entirely from that of ordinary printing on paper, and even among a large number of amateur workers a belief exists that, although printing upon such mediums is quite a practical thing in photography, it is much too difficult for any one who has not some special knowledge in this particular branch of work. It need hardly be said that both of these opinions are erroneous, the fact being that to print any suitable negative on a silken support is one of the easiest of all photographic printing operations. No doubt the stumbling block with those who consider the work beyond their capabilities lies in the fact that sensitized silk is not generally kept in stock by photographic dealers. Therefore, the moment they come to face the alternative of sensitizing their own material they sweep away all thoughts of utilizing this beautiful fabric for printing their negatives. From time to time a few enterprising firms have struck out on a fresh departure in this line of business, and not long ago a most excellent quality of silken fabric was placed upon the market in a ready-sensitized condition. A few dealers here and there at the time brought this material under the notice of their customers; but, like many another good thing, the venture did not apparently meet the support it deserved.

A young lady who has learned to appreciate the pleasure of printing on silken fabrics came to us the other day and said: "I've got my eye on auntie's silk blouse; wouldn't it be just the thing for printing a few photographs on? The summer is nearly over, and she will be having a new one next year." So in time auntie was wheedled out of her blouse and we were wheedled into providing a few suitable half-plate negatives. The scissors were soon at work ripping open the seams of the silken article, and in less time than it takes us to pen these lines quite a number of lovely silken panels were produced that are intended to adorn a stall in a bazaar during the winter. How was this accomplished? The blouse in question was made out of what is termed washing silk; this material is particularly well suited to photography; it can easily be detected from other qualities of silk by placing a small portion in a little cold water, when it at once assumes a hard, horny appearance. It has a brilliant lustre when dry, and will, with careful rubbing, stand washing with soap and water. After washing, an old sample is wrung out and dried and ironed in a damp condition, when it will look as good as new. In this state it is ready for being salted. Nothing can be simpler than this operation. Take a pinch of salt in, say, half a teacupful of water, and when dissolved pour it into a flat dish, immerse the silk in this for a few seconds, and dry before a fire. To prepare the sensitizing solution is also so ridiculously easy an operation as to cause any one to laugh when they see it done. Dissolve 60 grains of nitrate of silver in about 1½ ounces of water. Place the same at an open window in a small white glass bottle, or in the sun, for a day or so. In a short time it will begin to discolor and throw down a dirty deposit (the organic matter present in the water). When it again becomes clear and bright it is ready for use. To sensitize, place in a flat dish. Say, for a quarter-plate size, of material about half a teaspoonful or less of the silver solution, and immerse the salted silk, or rather let the silk saturate itself with the silver solution. When equally saturated all over, dry again before an ordinary fire, and repeat this operation once, holding it from the opposite side during the second drying. If this is done fairly quickly in a room which is not too brightly lighted there will be no injury from the light, but it is well, if possible, to close the shutters, or use a room with gaslight. When dry the silk is ready for the printing frames.

As to toning, some workers seldom tone at all. Let the printing be carried deeply, and then when the pictures come from the frames they receive a good washing in several changes of water, and are placed straightway into the hypo fixing bath. The whole operation is so easy and so rapidly performed as to cause surprise to those who have never seen it done. In some books of instructions the addition of gelatine or

other similar matter for the salting solution is recommended, but on textile fabric working some photographers of our acquaintance got along best by using nothing but plain salt and water; and, seeing that the sensitizing of a piece of silk can be accomplished in a couple of minutes' time, it is not advisable or necessary to so prepare the nitrate of silver solution as will allow of the sensitized silk being kept for any length of time before being used in the printing frames. Another great charm about pictures on silken fabrics will be found in the suitability of the color to the nature of the subject. Moonlight effects are produced by using suitable negatives, and warm, rosy tints can be selected to suit other class of subjects. Any lady or gentleman who once takes to this class of work will not be long before he or she gets quite enthusiastic over it. Beginners should rest content with small sizes to start with; lantern-plate negatives or quarter-plates are quite large enough, and with these sizes ordinary silken close texture materials are very suitable to employ. After a time larger sizes may occupy attention.

The printing of large photographs on silk (sizes, say, 12 x 10 or 15 x 12) is quite a different matter from manipulating tiny quarter-plates; and then provision has to be made for stretching the fabric, so that it lies flat in the frames. This is best done by stretching it to a sheet of cardboard, so that it will be sure to occupy the exact same place after being inspected during printing. For such large sizes a ribbed quality of material is perhaps the most suitable to employ. The material known as bengaline is among the most useful samples. In selecting negatives for printing on silk, it will be found that bold, vigorous printers will give the best pictures. Poor, thin negatives, in fact, are quite useless for this purpose, and the work should not be attempted with their aid. In printing of this description it will be found that much beauty is added at times by the employment of masks. This permits of a clear margin when desired all around the picture, and in some instances this is of value, for it must be borne in mind that, as a general rule, these pictures have eventually to be attached by means of needle and thread to their intended supports. For very small sizes lantern-masks do nicely; for other large sizes any photographic dealer will supply truly cut-out masks up to whole-plate size, and ovals, domes, or cushions can be selected according to the nature of the work the picture is intended for.

## PLAIN PAPER.

BY CHARLES E. FAIRMAN.

THE use of plain paper in photographic printing began at a very early period of the history of photography. Fashions in printing methods have experienced many changes since its first use. We have had papers with glossy surfaces, papers of different tones and colors; the use of plain paper has for many years been practically abandoned, and yet among the silver printing papers there are none presenting so many good features to the careful and painstaking worker as plain paper.

This paper presents the advantage of being adapted to the individual taste in the selection of a comparatively smooth or a rough surface-paper. It can be adapted to thin or dense negatives; it can be varied in tone from a black and white, through all the various shades of browns, purples, or grays; it will lay perfectly flat when finished; it is as permanent as the paper used in its production will permit; it can be bound in a book as easily as the other pages of the book; if heavy paper is used with a wide margin, the print can be plate-sunk, and it is inexpensive at first cost and manipulation.

I have said that plain paper is closely related to the early history of photography. Without delving too deep into the historical side of the question, it can be concisely stated that sometime during the period between 1835 and 1839 (the exact date seems not clearly established) Fox Talbot discovered that by coating a paper with common salt and then brushing the salted

paper over with a solution of silver nitrate, he secured a printing paper with one hundred times the rapidity of papers prepared with nitrate of silver alone. This solution was so adjusted that the nitrate was slightly in excess of the chloride, and upon this principle of the excess of the nitrate it seems all plain papers are now prepared.

*Chemical Reaction.* While it is inexpedient for the limit of this article to follow each step of the process with the chemical reaction, it may be proper to note at this point that the nitrate of silver and chloride of sodium produce chloride of silver and nitrate of sodium, and that in the subsequent steps of the work the nitrate of sodium seems to be lost and of no further utility.

*Apparatus.* To the economical worker the use of plain paper offers the attraction of a moderate outlay. If the paper is to be handled in full size sheets a hard rubber tray of suitable size for silvering should be used. The salting may be done in a wooden box lined with oilcloth or rubber. The toning can be performed in an agate ware tray, such as can be purchased at the hardware stores. In addition to these articles a box for fuming, some clips to hang the paper up while drying seem to be all that will be required. While if the paper is handled in small sheets and sensitized by brushing, instead of floating, most photographers are already in a position to adopt this printing method without other apparatus than they already possess.

*Paper Used.* As before stated, this printing method gives each individual the choice of the kind of paper required for his or her individual taste. For book illustrations the commercially prepared photographic papers are probably the best. For broad effects in printing the operator can choose from the various drawing papers, such as Whatman's, Michallet, Arnold's, and Knickerbocker. Any good linen ledger paper can also be utilized. *One thing should be remembered:* pure papers are necessary for the permanency of the print, and papers which contain hyposulphite of soda (and many papers are found with a trace of this salt) are not suitable if permanent prints are desired, and it should also be remembered that the papers used should have sufficient strength, so that they will not become "pulpy" during the thorough washing which is required to eliminate the hypo used in the fixing of the print.

*Sizing the Paper.* While all papers need a preliminary treatment in a "salting" solution before sensitizing, it is not necessary that all papers used should be sized. Papers commercially prepared for photographic purposes and the linen ledger papers may be used without sizing, while the drawing papers should all be sized before being salted, and it should not be forgotten that the coarser the texture of the paper the more important it is that it should be well sized.

A 2 per cent. solution of gelatine is as good a "size" as the practical worker can desire, and where heavy absorbent drawing papers are used for large prints the sheets may be "sized" twice with advantage. Sizing is done by immersing the sheets in sufficient solution to well cover them for three or four minutes, or the sheets may be coated by spreading over the surface a pool of "size" and rubbing it well into the paper with a Blanchard brush or tuft of clean cotton.

*Salting the Paper.* Some papers require no sizing, and these, of course, require one less operation. Salting is performed by immersing the paper in a tray containing a solution prepared as follows: chloride of ammonium 130 grains, sodium carbonate 3 grains, water 16 ounces. The paper should remain in this bath for about three minutes and then hung to dry in a room free from dust.

*Combined Sizing and Salting Baths.* Some prefer to accomplish the sizing and the salting in one operation, and for their use the following formulas are given: water 16 ounces, gelatine 16 to 80 grains (depending on the texture of the paper), chloride of sodium 30 grains, also water 16 ounces, arrowroot 90 grains, chloride of sodium 30 grains, water 16 ounces, common starch 90 grains. For weak negatives use 60 grains of chloride of sodium in place of the 30 grains given in the above formulas, while for dense negatives less than 30 grains of chloride of sodium can be used to advantage.

*Sensitizing the Paper.* The paper having been sized and salted and thoroughly dried is now ready for sensitizing. For those

who use large quantities of paper the most convenient method of sensitizing is by floating the paper on the sensitizing bath; for this purpose a glass or hard rubber tray should be used, and sufficient solution used to cover the bottom of the tray fully an inch in depth. Floating is accomplished by taking a sheet of the paper by the diagonal corners and bending the sheet so that its centre will touch the solution first, and lowering the sheet carefully by the corners so that it will lie perfectly flat on the solution without wetting the back of the paper; the sheet should then be raised gently, one end at a time, and the bubbles broken by touching them lightly with a glass rod. Sensitize for three minutes and then draw the sheet from the tray over the glass rod to remove the surplus solution, and then hang up by clips to dry in a room where some slight heat has been used to take up possible moisture.

Sensitizing and drying should be done in a room lighted by gas or artificial light, or in a room where the daylight is screened by a yellow curtain. The room should be free from dust and the sensitized sheets should not be permitted to touch while drying.

For those who use paper in small quantities sensitizing by floating will be objectionable on account of the quantity of solution necessary. It is possible to sensitize paper in small quantities by brushing the solution over the paper with a camel-hair brush set in pitch, or rubber bound. The brush will have to be carefully washed after use or it will rapidly spoil and become unfit for use. The paper should be brushed lengthwise and across so that all portions will be evenly coated. Paper should be fastened to a flat board with drawing-pins, and care should be taken to hold the brush in a vertical position to facilitate even coating. Some recommend a brush made by using a strip of glass of suitable length, from three to six inches in width and covering the end of the glass with a double thickness of canton flannel secured in place by rubber bands. The solution in this instance is poured in a small pool at one end of the paper, and is then guided over the paper by means of the brush. It is well to draw a light pencil mark over the back of the paper before sensitizing in order to determine the coated side after the paper is dried.

*Sensitizing Solutions.* In compiling these formulas we cannot fail to notice the wide divergence of opinion as to the number of grains of silver needed to each ounce of sensitizer. Among amateurs the tendency is to use a solution containing from fifty to sixty grains to the ounce, while among professionals a tendency to use a weaker solution prevails. When the paper is to be sensitized by brushing, the following formula is recommended: dissolve 60 grains of silver in ½ ounce of distilled water, then add stronger spirits of ammonia drop by drop, stirring carefully with a glass rod until the dark precipitate is redissolved, then add water to make one ounce. Another method of preparing the sensitizing solution is to proceed as in the formula given above until the precipitate has been redissolved, then divide the solution into two parts. In one part drop nitric acid drop by drop until blue litmus paper is changed to red, then add the other part of the solution, and, finally, water to make one ounce. If the solution is not clear it should be filtered before using.

In the United State Geological Survey plain paper is used extensively in printing from the wet-plate negatives of the field maps of the topographers. Rives paper is used without sizing and is salted with a bath containing six grains of chloride of ammonium to an ounce of water. The paper is sensitized by floating on a bath containing thirty grains of silver to the ounce. This bath is used over and over, and is kept in working order by the addition of water and nitrate of silver until the test by hydrometer shows thirty grains to the ounce. The prints are toned in a gold and soda bath containing one grain of gold to sixteen ounces of water. Toning is completed in three or four minutes, and good black and white is obtained by this process. Another method of preparing a sensitizing solution is to take nitrate of silver 50 grains, nitrate of ammonia 30 grains, stronger spirits of ammonia 3 minims, and water 1 ounce. Prepare the bath in quantity sufficient for floating the paper and pour into a bottle; mark the height of the solution on the bottle. After using the solution pour it back into the bottle and fill to the mark

by adding for each ounce of water nitrate of silver 50 grains, nitrate of ammonium 30 grains, stronger spirit of ammonia 3 minims. The first condition of the bath can be maintained by renewing to the hydrometer test.

*Fuming.* The paper having been sensitized and dried, it should then be fumed for about ten minutes in a tight box which is tall enough to hang up the paper by clips attached to wires running across the upper part of the box, leaving a space of eight or ten inches between the lower edges of the paper and the bottom of the box. Place a saucer containing a small quantity of stronger spirits of ammonia in the bottom of the box, close the door of the box and fume for ten minutes. There is a wide difference of opinion as to the value of fuming, and the burden of opinion seems to indicate that fumed paper prints more rapidly than the unfumed. It is certain, however, that very good prints may be obtained from unfumed paper, and when only small quantities are used the fuming may safely be dispensed with.

*Printing.* But little need be said upon the subject of printing, except that weak negatives should be printed in a weak light, while strong negatives can be printed in sunlight. The printing should be carried two or three shades deeper than the same negative would require if printed in albumen paper. The prints should be kept in a dark place from the time they leave the printing-frame until they are toned, and the toning should be done on the day of printing. It is equally important that the paper should be used as soon as it has been sensitized and fumed, and printing should not be delayed over twenty-four hours after the paper is sensitized. Some recommend storing the paper after sensitizing, and placing between sheets of soda blotting-paper, which is prepared by soaking chemically pure blotting-paper in a solution containing one ounce of carbonate of soda to twenty ounces of water. The blotters are then dried and are ready for use. It is claimed that paper can be preserved in this manner from one to two weeks, but as no one has claimed that papers improve with age, the safer plan is to use the paper as soon as prepared.

*Toning.* Before placing the prints in the toning-bath they should be washed in several changes of water until the slight milky appearance shown in the first washing water entirely disappears; the prints are then transferred to the toning-bath and toned until the desired tone has been reached, remembering that the prints will dry out slightly deeper than they appear in the toning-bath. The prints are then transferred to the fixing-bath, where they should remain for ten or fifteen minutes, and then transferred to running water, then placed upon sheets of blotting-paper and dried under pressure. It must not be forgotten that while the prints are in the preliminary washing waters and while in the toning and fixing-baths they should be kept moving, the position of the prints changed one by one, so that the prints will not be washed, toned, or fixed unevenly. The changing in the toning-bath should be done quite rapidly, and the prints carefully watched, or over-toning may result; care must also be observed in the fixing-bath, as prints which are allowed to settle together will fix unevenly and afterward become spotted and spoiled.

*Toning-baths.* As a general principle it may be stated that less gold is required in toning plain paper than is needed for albumen papers, and it may also be stated that the toning of plain paper occupies less time. For those who make but few prints the use of a bath that can be prepared readily is recommended, and the bath should be discarded after the toning is finished. For those who use plain paper continuously a bath that can be used over and over should be used. The following toning baths where small quantities are toned are recommended: water 9 ounces, gold solution (1 grain to an ounce) 1 ounce, neutralize with bicarbonate of soda. Care should be taken that the bath is not made too alkaline or too acid, and it should be used immediately. Another toning-bath for immediate use is as follows: water 10 ounces, gold solution (1 grain to ounce) 1 ounce, borax 10 grains. In using these solutions, if a black tone is desired, the prints should be toned until they are slightly blue and then given a supplemental toning in a bath of platinum toning solution. Platinum toning solutions are prepared and ready for use, and directions

accompany each bottle. That prepared by the American Aristotype Co. will prove very satisfactory.

A toning-bath which can be used over and over is made as follows: dissolve fifteen grains of gold in fifteen ounces of water, and use this as a stock solution of gold. To tone, take of water one pint, gold solution one ounce, and neutralize with a saturated solution of borax until a test with litmus paper shows a slight alkaline tendency. This bath can be used over and over by the addition of more gold when it becomes weakened from use, remembering to keep the bath slightly alkaline by the addition of borax. It is well to bear in mind that a bath too rich in gold is acid and that it will tone too rapidly and unevenly, and that a bath too strongly alkaline tones slowly. A bath in good working condition should tone in from three to four minutes, and a bath should not be too cold or too hot.

*Toning with Hypo.* Very pretty tones in warm browns can be obtained by omitting the gold bath and placing the prints after the preliminary washing in a hypo solution, one ounce of hypo solution (sat.) to four ounces of water. The prints should be printed very deep, so that the high-lights are quite deeply printed and the toning should be carried on for at least twenty minutes; the prints should then be thoroughly washed so as to remove all traces of hypo. Prints made in this way have been exposed to strong sunlight for months without showing any change, and are believed to be permanent if the paper used is of good quality.

*Fixing.* Prints should be fixed iu a hypo solution composed as follows: Hypo, 1 ounce; water, 10 ounces; and the fixing should occupy from ten to fifteen minutes. Too much emphasis cannot be placed on the final washing, which should occupy thirty to forty minutes, in running water or water frequently changed. Care should be taken to keep the prints from packing together.

*Mounting.* Any good mountant, such as Higgins' photo paste or paste prepared for the purpose from starch, will serve for mounting, and little need be said on this subject, as former experience in mounting prints will suggest the best methods.

*Plate Sinking.* An easy and effective way to plate-sink prints which have been made on heavy paper masked with a wide margin is to cut a card of thin Bristol board large enough to cover the print with a one-half inch margin all around. Centre the card carefully on the face of the print, take up the print and card without permitting a change of position, and place them against the window-pane, the back of the print being outward. Trace firmly around the card, which can be seen through the back of the print, with a blunt instrument, such as the bone handle of an ink-eraser. This will sink the centre of the picture to the depth of the card used, and when carefully done makes an attractive picture doubly attractive. It is believed that what has been written on the subject of plain paper will be sufficient to enable the careful worker to succeed without difficulty, and for this reason the citation of a multiplicity of formulas for sensitizing and toning has been omitted.

## LIGHT AND SHADE.

In a recent lecture before the Birmingham Photographic Society Mr. C. T. Cox repeated a few points on the study of light and shade which are worthy of place here. If photographers would only learn the value of observation from nature, and apply their observations in their work under the skylight, portraiture would lose many of the falsities and absurdities which at present cause artists to speak of it as something less than the art it is.

Mr. Cox said that many of the very poor photographs, and not a few paintings that could be classed in the same category, owed their evident defects to a lack of the appreciation of the effect which light and shade had upon a composition.

Those pictures which were flat—that is, which appeared to be all upon one plane—were due to this *prima facie* cause, and he pointed out to amateurs that the manner in which they handled these two natural products regulated the depth or otherwise of their landscapes. In fact, the only

means of giving recedence to different planes depends upon proper distribution of lights and shadows. There must be a tender gradation from light to shade, and from shade to light. In passing, Mr. Cox said great distinction must be made between reflections—which were often erroneously spoken of as shadows—and true shadows themselves. Not that it needed water to give reflections. No object in nature was really opaque, hence there was always a certain measure of reflectiveness from all surfaces that received (upon their surfaces) light. Ivy leaves, stones, pebbles, and even grass influenced gradation in pictures, and caused a gentle and general transition. "Further," he said, "there are no blacks in nature, not even a black hat, coat, or hen; it is only a negative of light, and even these supposed blackest of blacks contain blue, and thus transmit part of the light they receive. It is, therefore, our duty to observe effects even in things that do not promise to aid us. To see rightly is to half do."

The lecturer then continued by showing further that every shadow itself gradates. This could be proved by observation, and the opportunity to cultivate this grand faculty existed even in a smoke-begrimed town. He strongly advised his hearers to study well the passing effects of clouds, sunrises, and sunsets, and then they would be better able to appreciate Ruskin's statement that nothing was absolutely flat, and that even on a roseleaf or square foot of sky there was gradation of light and shade. The effects of light and shade could readily and rightly be studied by observing an egg or even a saucer, and how much more subtle is this light or shade in the tree of the forest or meadow. He pointed out that frequently he had seen photographs in which trees in the immediate foreground had been represented as being as black as night, because the photographer had been unable to realize or reproduce the subtle roundness which was to be seen when full observation has been allowed.

Why did a young artist make his first green field *too* green? Simply because he had not arrived at the point of discrimination of gradation which the field of waving grass possessed by very virtue of its motion. Then, again, the medium of air through which the photograph was taken was a most important factor in the matter. This could be observed by noting how *green* the *dun* sails of fishing smacks appeared as reflections upon the sea water, which also influenced the ripeness and richness of reflection. Passing from generalities, the lecturer pointed out that there should always be a dominant light and shade in every photograph. The closer these two were together the more dramatic was the effect. Separate them, and we get restfulness and repose. Be careful not to confuse dramatic effect and inharmoniousness. There was nothing inharmonious in nature. The two discordant notes—red and blue of the chromatic scale—never occurred in nature in juxtaposition without some intervening modification, so there was also no absolute white, or high light, or deep dark; all was gradual and harmonious, as even the bright lightning flash against the nimbus sky. It may be taken for granted that if a picture or photograph did not please us, it must contain a fault either in composition or in arrangement of light and shade.

There is always some *one* thing that stands out prominently, and this so impresses one that we are bound to take the picture. This prominent subject, or maybe idea only, should form the *motif* of the whole scheme.

It is our treatment of this *motif* that gives us harmony or otherwise. Study enables us to convert this means to our end, and as study costs so little, why do we hesitate? Study also strengthens the brain, and the brain enables us to form a poetic conception of a landscape. In a good picture there is always some mental effort required to appreciate it. Things that are self-explanatory are rarely appreciated, and all photographs should, therefore, contain some hidden beauty, some poetic meaning, and some soul.

---

An English seer sends to the *British Journal* a forecast of photography fifty years hence. Among other changes, pictorial photography will be dead; photography in color will be universal; lenses will be out of date; the amateurs will all be schoolboys; and, worst of all, all cameras will be "made in Japan."

## NEWS AND NOTES.

*There* has been considerable excitement in England owing to an alleged death from using X-rays. The yellow press worked up quite a little scare, but a coroner's jury decided that no blame attached either to the photographer or the surgeon.

*Bromide* paper seems likely to boom; the pictorial men in Europe have discovered it, and will shortly be turning out bromide masterpieces.

*The Edinburgh (Scotland) Photographic Society's* annual exhibition of photographs will be held in the rooms of the Society, 38 Castle Street, Edinburgh, from Saturday, February 16, to Saturday, March 9, 1901. Entries close on Wednesday, February 6, 1901, at 4 P.M. Reception of pictures closes on Saturday, February 9, 1901, at 10 P.M. The following classes are open to all—(gold, silver, and bronze medals in each class): Class 1, portraiture and figure studies; Class 2, landscape and seascape. All communications should be addressed to the Secretary, Mr. J. S. McCulloch, W.S., at 10a, George Street, Edinburgh.

*Genteel Starvation.* "Retouching done at home" seems to be a considerable business in England, for many workers regularly advertise for negatives. Some will take cabinet negatives as low as seventy cents a dozen, and one worker, grading his prices, offers to undertake full-length cabinets at four cents each. One unfortunate, who offers cabinet prints from photographer's negatives at thirty-six cents per dozen, will undertake retouching "at own prices."

*Photographing Public Buildings.* At this time of the year, says R. W. Lord in the *News*, when the light is not good enough for instantaneous exposures, the out-door worker is met with a difficulty when photographing public buildings, etc., where people are constantly on the move. He cannot give an instantaneous exposure owing to the poor quality of the light, and if he give a time exposure in the ordinary way the foreground will be considerably blurred by the movement of the traffic between the camera and the object he is photographing. In order to overcome this difficulty I have adopted the following plan: As it is out of the question to give a very short exposure I give a very long one. By stopping down the lens aperture to *f*/64 I am enabled to give an exposure of several minutes, so that the movement of the traffic in front of the camera has no effect on the plate. Keeping a sharp look-out for the approach of anything white, such as a lady's white dress or the inevitable baby in the perambulator, whenever anything of this nature approaches I put on the cap until it has passed, then take it off again. It is necessary also to watch for any of the passers-by stopping in front of the camera. Immediately there is any stoppage the cap should be put on the lens until the traffic has got in full swing again. I have sometimes stood as long as twenty minutes taking off the cap and replacing it, perhaps, a score of times, but I have been rewarded by getting a negative free from blurred figures in the foreground, which, by any other means, would have been impossible.

*A Simple Sensitizer.* Noticing the inquiries of several readers for a sensitizer, says a writer in *Photography*, I venture to bring forward the following one: Distilled water 10 parts, silver nitrate 3 parts, uranium nitrate 30 parts, and absolute alcohol to 100 parts. The material, whatever it may be, requires no previous preparation beyond sizing. The solution must be brushed on, and allowed to dry in the dark (which does not take long). When printed, it needs no toning, but is fixed in two or three baths of water acidulated with nitric acid, and washed. When warm tones are desired, the material is dried in front of the fire, or ironed on the wrong side with a hot iron. I have obtained very good results with this on silk, pocket handkerchiefs, post-cards, and other things besides. The solution must be kept in a bottle covered over with opaque paper, or else in the dark.

By HENRY H. PIERCE

*Exhibited in the Salon of the N. E. Convention, 1900*

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By HENRY H. PIERCE
Providence, R. I.

By ALFRED HOLDEN
Philadelphia

By B. J. FALK
New York

By PHILIP S. RYDER
Syracuse, N. Y.

By F. M. SOMERS
Cincinnati

By REUTLINGER
Paris

By SCHLOSS
New York

By C. A. ZIMMERMAN
St. Paul, Minn.

By HENRY H. PIERCE
Providence, R. I.

By ALFRED HOLDEN
Philadelphia

By B. J. FALK
New York

By PHILIP S. RYDER
Syracuse, N. Y.

By F. M. SOMERS
Cincinnati

By REUTLINGER
Paris

By SCHLOSS
New York

By C. A. ZIMMERMAN
St. Paul, Minn.

By H. C. MYERS
Boise, Idaho

*Awarded a medal at the Milwaukee Convention*

# OZOTYPE.*

BY G. F. BLACKMORE.

THE advent of a new process, or a notable modification of an old one, seldom fails to attract the attention of photographers—especially those who, in the practice of their hobby, endeavor to infuse into the records and souvenirs of their wanderings as much pictorial quality as possible.

If it be conceded that a photographer possessing the combined qualities of beauty and truth is preferable to one having the latter characteristic only, it seems obvious that every effort to secure these united qualities is to be commended and encouraged. It also follows that any new process which lends itself to the combination, either by affording a means of obtaining better results than are possible with any other process, or one giving equally good results with greater facility and certainty, must be accorded the photographer's hearty welcome.

Without wishing it to be inferred that the present well-known permanent processes are considered deficient in the principal desirable qualities, it is undeniable that the photographer, however skilled he may become, is more or less confined, within certain rigid limits, by the materials and apparatus at his disposal for giving effect to any artistic or pictorial ideas he may possess.

That many photographers chafe under this restraint, and strive after greater freedom and means of expression, has surely been abundantly demonstrated at the principal exhibitions held during the present year.

It would be beyond the scope of the present paper to discuss the merits and failings of the many revivals and improvements of the various printing processes, or to point out in detail the limitations to which brief reference has just been made; they will be only too vividly in the minds of all who have consistently tried to keep in touch with the latest products of the tireless experimenter.

In a general way one might repeat the well-known axiom that it is desirable, for any and all printing processes, to obtain as perfect negatives as possible. Further, while it may be fairly true that a perfect negative will yield a good print in any process, it seems a very general opinion that a thoroughly good negative for carbon printing is not of necessity an equally good one for platinum, and *vice versa*.

Assuming then that the photographer has obtained the best negative that the subject itself permitted, or that was possible under the existing conditions or circumstances, the next desideratum would appear to be a printing process of great plasticity and susceptible of very considerable modification and control, which, in the hands of a careful and fairly skilled worker, would enable him to give expression more freely to the ideas of beauty that the subject impressed him with, in spite of a certain amount of shortcoming on the part of the negative.

It will be for you to form your own opinion whether anything you will see and hear to-night constitutes an advance, however slight, toward the realization of your hopes, making due allowance for the very brief acquaintance of the lecturer with the process, and his consequent inability to do it full justice.

It seems probable, bearing in mind the almost invariable experience of the past, that prolonged trial, accompanied, as usual, with much vexation of spirit, will in due course prove whether ozotype in its present form, or with possible improvements, is to be one of the chosen processes for displaying the pictorial possibilities of photography.

Instead of making comparisons with other printing processes as we proceed, perhaps the better plan, while avoiding the quicksands of theory, will be to lay before you the working technicalities of ozotype, and at the same time draw your attention to some of the claims made on its behalf, leaving those who are well acquainted with other processes to institute comparisons for

* A paper read before the West London Photographic Society.

themselves, and thus pave the way for an instructive discussion.

The ozotype print may be said to resemble one in carbon in the constituents composing it, that is to say, the final image consists of insoluble pigmented gelatine supported on paper of suitable or desired surface and texture. The method of producing it—at any rate in the earlier stages—is essentially different.

The requisite materials are:

1. A supply of suitable sized paper free from alkaline substances.

2. A bottle of sensitizing fluid—to be obtained from the Ozotype Company, or dealers.

3. A small bottle of Lepage's fish glue, for sizing paper that may be bought in the unsized condition, but otherwise suitable.

4. A broad flat brush of soft bristle.

The other apparatus required in the after-treatment and production of the print will probably be in the possession of all photographers—at any rate, carbon workers.

Since very full and explicit instructions for working the process are given in Mr. Thomas Manly's book, the operations will be only briefly touched upon; a few results put before you, and, finally, one or two illustrations given of the methods of working.

In the first place, then, if a suitable sized paper is not readily obtainable, any other paper of good quality and surface—fairly smooth to be preferred for sizes up to whole-plate—may be sized in the following manner.

First prepare the sizing solution. A convenient and very satisfactory one consists of one ounce of Lepage's fish glue dissolved in nine ounces of water; when cool it is ready for use. Having pinned a piece of paper, say 30 inches by 22 inches, to a clean drawing-board or table, pour a small quantity of solution on to the paper, and brush it rapidly backward and forward, and again crosswise, to produce as even a layer as possible and to avoid using an unnecessary quantity of size. A very little practice enables one to judge where best to pour the size on the paper, and about how much will be required to comfortably cover the surface when well brushed. The drawing-board may be then stood on edge, and the paper left to dry, or the paper may be removed and hung up by the two top corners. If the paper is of open texture or an absorbent nature, a second coating of size may be given with advantage when the first is surface dry.

When the final sizing has become surface dry, but not hard, the sensitizing solution should be applied. It is probably unwise to perform this operation in full daylight, but it may be done with perfect safety by the aid of a comfortable amount of artificial light. The sized paper is again pinned down as before, and a small quantity of the sensitizing solution applied in a very similar manner to that adopted in sizing, but with this difference, that the amount of sensitizing mixture may be accurately measured, and waste avoided. The amount required for the size, 30 in. by 22 in., before mentioned, will vary from three to three and a half fluidrachms, according to the texture of the paper used. A useful figure to remember will be one drachm to one and a half square feet of surface.

When this solution has been carefully brushed all over the surface so as to cover it evenly, the paper may be hung up to dry, the time for which will be from 15 to 60 minutes. It will be found that complete success with this process will depend largely on the care with which the paper has been sized and sensitized. If there are any serious inequalities they are apt to show in the print and ruin it.

The drying of the sensitized paper must unquestionably be carried out in a non-actinic or a very subdued artificial light. When dry it may be at once cut up to desired sizes, being careful to leave an inch or so of margin at each end for handling. A slight margin at the sides will also be found an advantage.

In this state the paper is ready for printing, and will keep in good working order for a long time if cared for in the same manner as platinum paper, and for some weeks if put in a dry drawer under slight pressure. The operation of printing is conducted in the same manner as with platinum paper; the time required is perhaps somewhat less, and the appearance of the image almost identical. Any difference will be in the direction of a stronger print, having more of the fine details visible.

The next operation is to thoroughly wash the prints, and in order to economize time a number may be operated on at once. Place them, one at a time, in a large dish of cold water—in any convenient place and in any light—and keep them moving for ten minutes. Pour all the water away and refill with clean water for a second and third bath of 10 minutes each. The prints are then ready to be hung up to dry. With very thick or absorbent papers, an increase in the number of baths or in the time will certainly contribute to better results indeed, there seems no objection to a fairly prolonged washing to ensure the removal of all chemicals unaffected by light.

The surface moisture may be blotted off without injury to the prints, which, when dry, may be kept indefinitely, or until a suitable occasion presents for pigmenting them. They are, of course, no longer liable to injury from light.

When about to pigment the prints we proceed as follows: A bath is made up of water 40 ounces, glacial acid 60 minims, hydroquinone 15 grains, and pure sulphate of iron 5 grains. The ingredients are added to the water in the order given, and thoroughly dissolved before using the bath, which will remain in good order for two or three weeks.

It is stated that this bath should be used at a temperature of from 65° to 75°, but the reason is not given; presumably, it is to be sure of getting the gelatine—with a definite time of immersion in the bath into a suitably soft condition for making close contact with the whole surface of the paper print, when the two are squeegeed together.

Having prepared the acetic bath, with, say, an inch and a half depth of solution, and warmed it to the required temperature, take a piece of the pigment plaster and place it face downward in the bath. After about half a minute's immersion, turn it over and brush the face gently with a flat camel's-hair brush to remove air bells, etc. In about another half minute the plaster will be soft and limp; then take a print and bring it into contact with the plaster under the surface of the solution, taking care to lower it into the bath in such a way as to avoid air bells if possible. Lift the two out of the bath together, lay them down on a flat surface, plaster uppermost, and firmly squeegee them together. After removing the remaining surface moisture with blotting-paper, hang the prints up to dry.

When the pigmented prints are dry, or have been hanging in a dry place for not less than three hours, they are ready for development. In this state, also, the prints will keep a considerable time without deteriorating.

The process of development will present no novelties to the carbon worker, and no difficulties to the beginner.

A large tray to contain hot water is almost the only thing necessary, with some means of keeping the water at a temperature of about 105°. While the hot bath is in course of preparation, place the prints in cold water, and let them soak for 20 or 30 minutes—depending on the time of year—colder weather requiring the longer period.

If a large number of prints are being dealt with, it may be necessary to remove some of them after half an hour's soaking, and place them on blotting-paper to await development.

Take one of the soaked prints and plunge it under the surface of the warm water; allow it to remain from one to one and a half minutes, then take hold of one corner of the paper backing of the plaster, and gently, but firmly, strip it. Care must be taken not to stop during this operation, which should be performed quite under the water or quite out of it. The objection to a stoppage in the act of stripping is that the print is liable to show a mark at the point where the delay occurred. The print may now be developed, or, if a number are to be done, it may be placed, face upward, on blotting-paper until all are stripped.

To develop the print, place it face downward in the hot water and leave it for about a minute to soften; turn it over and draw it on to a piece of zinc or glass to form a flat support, and then lave or splash water over it with the hand, or pour from a cup or mug until development is deemed complete. Sufficient experience will soon be gained to enable the operator to decide whether the print requires more or less soaking, in addition to the laving or pouring operations.

When development is complete, the print may be placed at once in a cold alum bath, and then, with a final rinse in cold water, hung up to dry. If the alum bath is postponed until after drying, to permit of slight local development, the prints should always be put into cold water for a few minutes — just to chill the gelatine—before hanging up to dry, or there is great risk of the image running in beads and ruining the prints.

When finally dry, after the alum bath, the prints may be mounted or handled in the usual way, the image being no longer soluble.

It would be presumption on the part of a beginner to speak of defects in the process, but there can be no objection to his pointing out where he has failed to get the desired results, or where the prints fall short of his ideal.

Practically, the only difficulties met with have been to acquire a correct judgment of the correct depth of printing with various negatives, and to get the plaster to adhere evenly on rough papers.

The prints shown to-night indicate clearly that the former difficulty is soon overcome; the latter, it is confidently hoped, will disappear with a little more practice.

One peculiarity may be mentioned, as it seems difficult of explanation, viz., the failure of the pigment plaster to adhere to the print outside the edge of the negative, and where the greatest exposure to light had taken place.

The points of superiority over other processes appear to lie with the means of producing the prints, rather than with the results.

The claims may be briefly stated as follows:

1. The resulting print is permanent.

2. Paper with a variety of tones and surfaces, at the choice of the worker, may be used.

3. Various colored pigments are available, giving definite and invariable results as regards tone or color.

4. Modifications may be made in the sizing and sensitizing of the paper, and in the composition of the bath used for pigmenting; all of which are said to give control over the final print.

5. By means of the above modifications, various grades of negatives may be used to produce satisfactory prints.

6. All the materials will keep—almost without exception—for an unlimited time without risk of injury.

7. The only operation that cannot be performed in ordinary daylight is drying the sensitized paper.

8. A delay of a week or two between any two consecutive operations will not injuriously affect the result. This quality is, of course, invaluable to the amateur.

9. It is to all intents and purposes a printing-out process, no actinometer or print meter being required.

Nearly all the prints attempted are shown to-night with notes upon them indicating the probable or supposed causes of failure.

With an illustration of some of the principal operations the subject is at your disposal for free discussion and liberal criticism.

Mr. Manly has been kind enough to send particulars of his latest practice, with permission to place them before you. He says:

"I find it a good plan to dip the washed and dried prints in a glycerine solution (glycerine 1 part, water 2 parts) just before applying them to the plaster in the acetic bath. This prevents air bells from accumulating, and causes the gelatine to adhere properly to the paper. If you have no glycerine, sugar will do as well—loaf sugar 1 part, warm water 4 parts—draw the prints over the surface of the solution. The acetic bath I find best for good negatives is:

| | |
|---|---|
| Water . . . . . | 40 ounces. |
| Glacial Acetic Acid . . . | 60 minims. |
| Hydroquinone . . . . | 20 grains. |
| Ten per cent. solution of Sulphate of Copper . . . | 60 minims. |

The sulphate of copper (which can be left indefinitely as a 10 per cent. solution) I find more convenient than the ferrous sulphate. For cartridge paper (which should be good), or for Whatman's hot-pressed, coat the washed prints, with a camel's-hair brush, with the following sizing solution:

| | |
|---|---|
| Fish Glue . . . . . | 2 drachms. |
| Glycerine . . . . . | 1 ounce. |
| Water . . . . . | 6 ounces. |

And put them in the acetic bath without drying. The paper used need not be sized previous to sensitizing, and the plastered prints can be developed two hours after the acetic bath, whether wet or dry."

## ABOUT READING AND TAKING NOTE.

We have more than once referred to the very ephemeral way in which photographers read. Not that the trouble is confined to the professional worker; it touches the amateur, and doubtless all classes of people. The questions which reach an editor sometimes become almost a standing joke. One poor man who ran a magazine for amateurs was once asked forty-three times in one month how to mix a hypo bath. We are all apt to laugh at the amateur who weighs his hypo and makes a note of every exposure, but it is a good fault, much better than the average carelessness. The helpfulness of system in such matters as recording the exposure details of plates, storage of negatives, classification of prints, and similar details of daily procedure have been expatiated upon again and again.

At present we are interested only in the question of saving odd notes that may be useful. There is little that is new, but much that is forgotten. Some months ago we wrote on the making of ambrotypes, not for the first time. Two men, one in Washington and one in Indiana, wrote us that they had followed the hint, and it had helped them through a dull season. There is much good matter appearing in the magazines, and those who take several magazines find some of them contain much matter of no use or of ephemeral interest. Those who pile up many magazines will find that they cannot get hold of the information contained in them. The bundles of papers grow at an alarming rate, and at last have to be got rid of.

The man who can remember what he reads is very rare. If, therefore, he wishes to get the value of his information he must file or carefully index. *Photography* mentions two ways of doing this:

The first to suggest itself is that of a reference index. For example, we may invest in a notebook and index it, giving two or three pages to each letter. Thus, under P we should find platinotype process, platinum toning, printing in silver, uranium, iron; printing on wood, metals; prints faded, and so on; and under each heading the volume and page of the article. Now this seems an ideal system, and so it is just at first, but very soon it is found that some pages get overcrowded with entries, while others are almost blank. Again, new headings are required to be inserted between two others where there is no room. The next plan is indexing on separate sheets. Thus a few quires of ruled paper in cut sheets are bought. Each page is kept for a separate subject.

This index system has the advantage that the headings can be rearranged in a moment, and a new page inserted anywhere. If stored in a flap-end box it is tolerably easy to keep the sheets in proper order. Now, this or any other indexing system presumes that the subject matter has been kept easily-get-at-able—either by keeping the issue intact, or pages separated but in order, or put in a scrap-book chronologically, or some other plan of a like nature. One serious disadvantage of this system is that the several articles on any one subject are not kept together. For example, suppose one wishes to look up uranium printing, it may easily happen that we have to hunt up half a dozen numbers of various periodicals, collate them, and then, worst of all, perhaps have to put them all back into their proper places in a most conscientious way, otherwise our whole system becomes useless. Again, the indexing method has other disadvantages—one is very apt to keep the same article in two different journals. Also, it is very easy when hunting for one article to disturb others, and, of course, the corresponding chance of the whole pile slipping on the floor and getting terribly mixed.

The other chief plan is that of ruthlessly cutting up one's weekly numbers and keeping the pages to be preserved according to some classified system. Two methods along these lines have been tried, and again with advantages and disadvantages. The first is that of keeping the cuttings in large envelopes or bags; that is to say, a separate bag for each subject. For instance, developers, intensification, toning, mounting, and so on. This method has the advantage that one can easily add or subtract a cutting, but, on the other hand, these cuttings are very liable to get mixed, and

very soon become so numerous that it requires a saintly patience to find the one wanted, which in nearly every instance is the last but one in the bag. The other practical alternative seems to be that of the scrap-book, or, rather, scrap-books, for a brief experience shows that it is better to have several small books than one large volume. The great advantage of this system is that the various notes on any point are kept together always, the disadvantage being that it is not easy to rearrange, or to know how much space to leave for future cuttings. On the whole, the scrap-book system seems to present most advantages, but the following points must not be lost sight of: To facilitate rearrangement, stick in the cuttings by one edge only. Leave plenty of room for future cuttings. Use one side only of the scrap-book. Classify the cuttings *not* alphabetically, but by natural affinity—according to the usual order of procedure; for instance, notes on intensification should come after, and not before, those on development, and so on.

It has been our specific purpose to avoid giving any very definite advice or instructions, because it is far better that each one should try one or two different plans for himself, so that he may by actual experience find out which system best meets his own requirements. Each of the systems above mentioned possesses some special advantage, so that it may well happen that a system most convenient for a general reader would be inconvenient for one engaged in some special line of study. But in each and every case we are convinced that some system would quickly be felt to be a substantial advantage in the matter of saving of time and aid to memory labors.

A careful decision as to what may be useful will save much storing. For instance, the photographer who uses a good plate and understands it may read about developers or development, but he need not fill any space with cuttings on the subject. And this brings us down to a practical hint. Few will commence an index, but all should keep a drawer or envelope for *ideas*. Never a month passes but WILSON'S contains some ideas worth remembering; sometimes dozens of them. It may be a picture; some new pose or lighting; or it may be some wrinkle in mounting or trimming, or some new style which will be calculated to draw custom. If you keep your WILSON'S, all bound (which we hope you do), search through them in your spare moments until you find some idea; then think it out, and when you have thought it out, go ahead. But where you don't bind, tear out the wheat and get rid of the chaff. It may be a note from the daily paper, or it may be a picture from one of the weekly magazines; but wherever anything appears which may be useful, be sure to save it for after usefulness.

## FILMS.*

BY A. L. HENDERSON.

I QUESTION whether a chat on the above subject will be as popular as it deserves to be, seeing that the film manufacturers are limited and the users unlimited, yet we have the consumer to study, and if a satisfactory film is produced commercial success must be the result. I will not here attempt to give a history of films from their earliest introduction, but we have the names of Woodbury, Warnerke, Stebbing, and others associated with their production. I personally assisted the former gentleman with some of his experiments; he then used gum resins, which, as a whole, were unsatisfactory. The principal cause of failure was the evaporation of the essential solvent of the gums, and this up to the present time is a drawback. One of the requisites of success is the production of a lightly sized (starch size) paper, colorless, although coloring matter may be introduced, when the film has to be stripped.

For the coating of the paper with an inert substance I recommend beeswax, well purified by melting or boiling it in water, with a caustic alkali, and after carefully washing away the alkali allowing it to cool.

* Extracted from a paper read before the L. and P. Photographic Association.

The cake of wax will be found on the top. I need scarcely add that straining through muslin when in a liquid state is requisite. The fact that on many of the Egyptian mummies wax is found covering the strappings shows that in those days its properties were known.

History repeats itself. I have here some wax-paper negatives taken in the year 1845 by the late J. G. Tunny, of Edinburgh, and some prints taken from them by immediate contact, and others through the paper. Note how little grain is visible, yet the paper is very thick, and in those days paper-making was not so well understood as now. Celluloid, as far as transparency is concerned, is good, but, as a whole, has been found wanting. Who is there among us who has not found markings running all through a spool, or fogged results? These causes are manifold. Pressure and friction will give markings. If I take a hard pencil and write my name on a thin piece of paper over the face of a very sensitive dry plate or film I can develop the writing. Prolonged pressure will produce similar markings, but with glass there is less liability. I must not forget to call attention again to the reducing action of the solvent of the pyroxyline.

Why, some of the large manufacturers of films do not guarantee them after, say, three months. Are they guaranteed ninety days? Does deterioration take place in two days? This is running it close, and it does the discoverer credit. As you are aware, I knock about a great deal, and I invariably inquire of amateurs about their films. The answer is, that in hot weather they fog, and in all climates they get the markings referred to. I believe beeswax paper, properly prepared, will greatly obviate the faults. Glycerine is greatly to blame for fogging. In my early experimental days I frequently added glycerine to the finished emulsion, with the effect that the plates gained in rapidity for a time; then fog stepped in. Probably the makers of films add glycerine to give pliability.

It is very well known that gelatine has great contractile power, and it will sometimes strip the glaze from porcelain. In lieu of glycerine I would advocate meta gelatine in such small quantities that frilling will not ensue.

While I am waxing strong I may as well mention that beeswax is seldom to be got pure. Beekeepers frequently use artificially made comb, and the bees are actually deceived. When one buys honey in the comb the wax may be impure. Brodie says wax is composed of three substances —73 per cent. of myricin, 22 per cent. of cerin, and 5 per cent. of cerolein. I have little doubt that cerin and cerolein are got rid of by boiling.

Any solvent that will evaporate rapidly will answer for coating paper. Some of the samples I show you are coated with wax dissolved in benzoline spirit; other samples wax and gum dammar, collodion, and collodion and white hard varnish. I have lately coated some platinotypes and bromide prints, which has greatly improved their appearance, enriched the shadows, and very slightly lowered the whites. Thirty years ago I used to coat all my colored photographs with collodion and varnish. I saw one recently that had been so treated, and I could not detect any change.

Another use for the wax spirit may be mentioned. Should a negative exhibit slight red spots caused by the silver on the unprotected film, a little friction with a piece of rag saturated with the wax compound will invariably remove the stains, and it acts as a varnish on the negative afterward. The proportion of wax to spirit will depend on the porosity of the paper and its thickness; very little will suffice. The pieces of paper before you were coated with about 2 per cent. of wax to that of benzoline.

A few more words on films and stripping. Professional photographers will not use them, and amateurs will not take the trouble. A film must be of a certain thickness. Then the opacity is objectionable when developing. Here are some examples of supports. It is curious to examine them by transmitted as well as by reflected light. They speak for themselves. I am astonished that the "Vergara" film should not be in use. The slight greenish color is of little moment, to be sure. Formalin has been introduced, and is a good substitute for the bichromate.

A film-maker has told me that "he uses a thick, hard paper, prepared with certain

gum resins, such as copal, etc., coated after with gelatine, and then with emulsion." I have carefully tested the paper for resins, and I have failed to find any. I cannot see the necessity for their use.

I have been trying to get some coagulated albumen paper, but failed. I have made some myself which has answered the purpose, although not so good as I would wish. Coagulated albumen is a good substitute for glass, and in the case of stripping *a la* "Secco," bear in mind that the paper to which the negative is squeegeed must be of a porous nature or the film will not dry. Coagulated albumenized paper is the best, and it may be used many times.

In concluding my "chat," I would say that my subject is by no means exhausted.

## COPYING GLASS POSITIVES.

MANY things, "all in the way of business," come to the professional photographer—faded cartes of thirty years ago, daguerreotypes, tintypes, ambrotypes, and a host of similar things of the souvenir nature. The daguerreotypes are now few and far between, for they belong to a forgotten generation. The last generation is more known through the glass "positives," or, later still, through the carte-de-visite. Few of these relics of the past have any value beyond the fact that they are the only picture of someone who has passed away. Often they had been taken much as a tintype is to-day—on the spur of the moment, and for sheer fun. Naturally they are not the best of work, but they cannot be replaced. The photographer must, therefore, understand exactly what he is going to do, and must not indulge in any experimenting.

A glass positive is really a thin collodion negative, backed up with a black material, such as black velvet or black varnish. Sometimes it is protected with a colorless, transparent varnish, and sometimes it is not, as the varnish, if a spirit one, always degrades the whites of the pictures somewhat; its use is not, and was not, universal. Sometimes the varnish has been applied on the collodion film and at others on the back of the glass itself; then, of course, the picture, as regards right and left, is reversed. When this was done, more often than not the picture was not varnished at all, so that better whites were obtained. In this case the picture to be copied must be carefully handled, as the collodion film will be found in a very tender condition as compared with a gelatine one, and sometimes, through imperfect washing or a decomposition in the collodion itself, it is so weak as to be injured by a dusting-brush, unless delicately applied. If such a film were now to be varnished with a spirit varnish in the ordinary way, it would probably be dissolved off the plate, because the film in this state is soluble in strong spirit; therefore it should be left alone.

The black varnish backing is often so cracked and reticulated that it must be removed. This may generally be done with benzole, applied with a piece of rag, but not always, particularly if the picture has been much exposed to light, for then the bitumen in the varnish may have become insoluble. If this has happened the varnish can be removed by scraping with a knife, but as it flies off in a very dusty fashion care must be taken to protect the delicate film side from the dust.

If the black varnish has been applied on the collodion film, and has cracked and split the collodion film with it, the case is difficult to deal with; the best way will be to simply put a piece of black velvet at the back of the plate or copy it as it is.

There are ways of removing the varnish from the collodion, but the inexperienced man who tried them would court disaster.

Unfortunately, the ambrotype is often not only in a bad state of preservation, but was poor work originally. In such a case they should be used as a negative.

A glass positive is really a thin negative, and might be used as one, particularly if it were intensified; but, of course, that is out of the question. However, there is no reason why it may not yield a good reproduction if copied in the camera by transmitted light; indeed, it generally happens that the worse the picture is as a positive the better it is when viewed as a negative. In making the transparency from such a

picture, a plate giving great contrast, such as photo-mechanical plates do, should be employed, and the contrast increased as much as possible in the development. Then, in making the negative, a plate of like character, with similar treatment, should be used. Working in this way, it is generally possible to obtain a copy of a bad glass positive that is infinitely superior to the original.

If an enlargement is desired, it can often be successfully produced by making it direct from the original, using the positive as a negative, on bromide paper, without further trouble. Should the portrait be colored, the color will add to the density of the image and be an aid when working by transmitted light.

If even a ghost of a copy can be obtained it will serve as a basis for working up to any extent, and a picture can be made which, for its purpose of pleasing the customer, will be superior to the original.

## TEMPERATURE IN DEVELOPMENT.

If all photographers could have their dark-rooms comfortably heated to say 60° we should hear little of this perennial question. But as it is, the question of temperature is forever with us. We hear much about cold solutions, but solutions too warm seem to be a greater, as they are certainly a more apparent, evil. Equable temperature and from 60° to 65° has many advantages, not the least of which is that with a correct exposure the negative will come out of the developer just as it is expected to do. There is a common belief that a warm developer brings up more detail than does a cold one, but this would seem to be a mistake. Warm developer accelerates development in the shadows, and so gives a soft negative. A cold developer, say 50°, by acting much more slowly than one of 60°, gives a hard contrasting negative. Too warm a developer results in flat weakness. A writer in the *British Journal*, experimenting with different temperatures, relates his results. He selected 65° as probably the highest temperature at which one could work ordinary plates successfully, and without resorting to special precautions for the prevention of frilling, blistering, or solution of the film, and against this we pitted 32°, or the freezing point of water. A plate was exposed for a normal time, and was then cut in half. Two pyro developers were made up, each containing precisely the same proportions, but one completed with water carefully adjusted to 65°, the other with water containing melting snow. The normal temperature of the developing-room at the time was 50°.

The behavior of the two halves of the plate under treatment was carefully watched and noted. In a few seconds under a minute the warmer solution commenced to render the image visible, and in three minutes the detail was well out, after which it gained in density and filled up considerably in the shadows. At the end of seven minutes the development was stopped, all having been got out of the plate that seemed possible. The temperature of the solution was found to have fallen seven or eight degrees.

The second solution failed to produce any visible effect until it had acted for nearly three minutes and a half, after which it proceeded as steadily and rapidly as the other. The temperature was taken when the image had commenced to appear, and was found to have risen several degrees, the exact number it was impossible to arrive at in the dim light of the developing-room, without introducing an uncertain element into the development by keeping the film uncovered too long. At seven minutes this plate showed as much detail as its companion, with less density, and considerably clearer shadows, so the action was permitted to continue up to ten minutes, when, all further action having apparently stopped, the plate was washed and fixed.

Upon comparison of the two plates after fixing and washing, the following were their respective characteristics: As regards the amount of detail produced they were equal, except in so far as the density of the finer shades was concerned. It might be supposed that the three minutes'

additional time enjoyed by one plate might give it an advantage in that respect, but such did not seem to be the case. In point of density, the plate developed with the warm solution had very distinctly the advantage, but accompanying this advantage was also a very perceptible veil over the whole plate, giving the image a flat appearance not possessed by the other. That this was not a deposit caused by light was proved by the fact that the clear portions of the film protected by the rebate of the slide showed it as palpably as the rest of the plate. In addition to the greater clearness of the shadows of the cold-developed plate, the color of its image was colder and blacker than the other; indeed, the difference was similar to that produced by clearing a film with alum and acid.

In addition to this initial experiment many others were made with a view to ascertain whether, under any circumstances, it was possible to get more out of a plate after a given exposure by warming the developer than could be obtained otherwise, but the result was in every instance negative. The conclusions arrived at were as follows:

That raising the temperature accelerates development, chiefly at starting; that it tends to abnormal reduction of the silver in the film, as well as to mechanical staining by the developer; that it necessitates a larger proportion of bromide than the normal—or what is probably equivalent—a smaller proportion of ammonia, in order to produce the best result.

That lowering the temperature considerably increases the time required to start development, but when once started the action proceeds regularly. It leads to the production of clean, bright images; it will admit of considerable increase of the normal quantity of ammonia or a corresponding decrease of bromide, in order to hasten its action.

This would seem to suggest that the heating of developers is as detrimental as the too much cooling of them, and brings us back to the proposition that an *equable* temperature of about 60° is the best.

The fixing bath deserves a word. If too cold it may stain the negative, and the film may later turn yellow. A too cold developer is slow working, and not always thorough, and to insure safe results a temperature of 60° to 70° should be maintained.

## PRACTICAL POINTS FROM "MOSAICS, 1901."

THE large edition of *Mosaics* has disappeared more rapidly than usual this year, and those who have not yet secured a copy should order at once to avoid disappointment. The type is distributed, and we cannot reprint.

On every side we hear of surprise and pleasure in the improvements shown in the make-up of *Mosaics*. The general opinion is that it is distinctly the most practical and useful of all the year-books —which we intended. As a collection of American portraiture at the beginning of the New Century it cannot be equalled anywhere. And its monographs on *Platinotype, Carbon and Plain Paper Printing, Studio Construction, Outdoor Portraiture*, etc., give the little book unusual value for reference during the year.

Mr. Richard A. Anthony, of the firm of E. & H. T. Anthony & Co., writes: "Accept my thanks for *Mosaics, 1901*. It is a very creditable publication, and I think much better than any previous number that I have seen. The illustrations are unusually attractive and very well printed."

Mr. A. C. Lamoutte, of the Scovill & Adams Co., of New York, writes: "I desire to thank you for *Mosaics, 1901*. It is a very great improvement over its predecessors and ought to meet with a good sale."

A glance through the book tells why it deserves this praise. In what other year-book can we find, conveniently grouped, examples of the recent portraiture of Falk, Strauss, Hollinger, MacDonald, Core. Pierce, Hoyt, Place, Gutekunst, Somers, Jansen, Benjamin, Davis and Sandford, Taber, Steckel, Schumacher, Goldensky, Hall, Tingley, Brenner, Holden, Schloss, Randall, Brush, Morrison, and all the other leaders who have made American portraiture famous all over the world? Everyone is a careful bit of work and offers a distinct lesson in lighting, posing, and arrange-

ment. We may fairly say that the collection of portraits given in *Mosaics, 1901*, for fifty cents, is honestly worth four times the price of the book to any photographer. They are all well printed on special art paper, which reproduces very closely the charming qualities of the originals. The convenient size of the book makes it a handy volume for the work-room, shelf, or coat pocket.

It is of the practical instruction given in *Mosaics, 1901*, that we intended to write, however, and this is demonstrated in the subjoined extracts from articles in *Mosaics*. Thus, in a 25-page article on "Studio Construction," Mr. W. E. Ward says:

"*The Single Slant Light* is much talked of, and a number of photographers are using it. One advantage of a side light is that it more nearly approximates the light in a home. (The lightings often used are purely photographic, and untruthful as far as home appearance is concerned.) H. P. Robinson favored a single slant—or, to be more accurate, a purely side light—in one of his books published many years ago. His suggestion was a room some thirty feet square and fourteen feet high; glazed on the north side only from the top to within four feet six inches of the ground. Several studios more or less answering this description are in successful operation. One advantage of abolishing the top light is a wide choice of location. A photographer may take a room on the second or third floor of a building instead of perching on the tiles. It does away with several very real disadvantages. There is no leaky roof to contend with, and there is no possibility of being snowed under. The escape, too, from the elbow where the roof and side meet tends to strengthen the structure and lessens risk of breakage. In practice, some who have tried this form of studio find that they cannot get a sufficiency of light except close to the window, and to remedy this they have modified the form to a single slant. By letting the top of the light be some three or four feet further in the room than the bottom, they compromise on this defect, and still retain the structural advantages.

"Studios have been built in many different positions, and some of the best work has been done in the most inconvenient of them. There is an old saying that an east light requires an exposure twice as long as usual. The east wind has had—in Europe—a bad reputation, from scriptural days onward, and it is too late to hope for change of opinion. In this part of the country, where the freezing wind is from the west, I suppose we should reverse the verdict. One of the most successful of Fifth Avenue photographers boasts of his east light studio. But as long as there is, by universal consent, a best direction, no wise man will face east or west unless he has some sound reason for it. The objection is one of hourly inequality in light and heat. Before noon the east window receives the direct sun, and after noon his rays strike more and more directly into the west window. Next to the north light, the south light is perhaps the best, for here the whole day the sun shines in, and can be checked by special devices. East, west, and south, all have their special and enthusiastic believers, for the man who successfully uses such a studio is not likely to remain quiet about it. One ingenious point in favor of an unorthodox studio is that its difficulty of working prevents the photographer from falling into a few set poses, and by the very irregularity of his light forces him to discover unusual and novel effects."

The article is fully illustrated with diagrams and engravings.

Mr. G. G. Mitchell discusses "The Teeth in Portraiture," a detail which has hitherto escaped attention. His suggestions are eminently practical, and the article is one which deserves close study. He says in part:

"I have found that a light, reposeful position of the lips is got by most people if they just quietly close or shut the teeth together, for many sitters close the lips while the teeth remain apart; but, of course, each sitter must be dealt with on his own merits.

"The subject is in some respects a delicate one to manage, but given an operator who has a proper appreciation of this feeling, much can be accomplished.

"When it is decided that the teeth must be left visible they can often be made less conspicuous if the face is turned from the light—the side light diminished and a high side light increased. The effect of this is

to throw the mouth in the shadow of the upper lip; at the same time care should be taken to pose that side of the face which will best lend itself to the object in view.

"The screening effect of this shadow can be advantageously observed when a portrait of this class is viewed by reflected light through the back of a negative. I have known a sitter to like a portrait seen in this way, who demurred to it in the finished print, which then revealed details not seen in the other form. Let the shadow, therefore, be deep enough to print well out."

*Platinotype Printing* is dealt with most completely by Mr. Henry Troth, one of the most expert of platinotype printers. His points are well chosen, and the article will clear away many of the everyday troubles experienced in the printing-room. For example, Mr. Troth says:

"Sometimes printers complain of white, brown, and black spots which appear on the prints during development. In nearly all cases they are due to the printer's own carelessness. These defects usually originate in the negative dark-room, where the printer has cut or otherwise handled his paper, after having weighed out dry pyro, hypo, or other chemicals. Should a few particles of pyro or hypo find their way to the sensitive surface of the paper, they would not then be noticed, but would work destruction when the prints reached the developer. When these spots occur, a thorough investigation should be made. To be on the safe side, it is well to dust off the paper as well as the negative before starting to print.

"There is a case on record where a whole batch of large prints were ruined because the printer neglected to thoroughly cleanse his hands before starting to develop his prints, after having intensified some negatives in a mercury bath. The prints showed brown spots and streaks which he was at a loss to account for, until an investigation proved that he had only rinsed his hands in plain water."

E. W. Newcomb's lengthy but interesting paper on "Carbon Printing for Professionals," and Dr. Nicol's article on "Printing on Home-made Plain Paper," do not lend themselves to extracts, but are full of suggestion and helpful advice.

*Mosaics, 1901*, is a book which every photographer should possess and use as a handy course of study for the year. Considering its obvious value, the price is nominal and the opportunity one not to be missed. Sent post-free to any address for fifty cents, or in an attractive cloth binding for one dollar.

## AT THE STRAUSS STUDIO.

We cull from the beautiful Christmas number of the *St. Louis Mirror* an imaginary conversation at the Strauss Studio. It is a "breezy" bit of writing, and forms as attractive an advertisement as we have seen in some time.

They met at Strauss' Studio, on the fourth floor of the new Y. M. C. A. Building, Grand and Franklin Avenues—two lovely young things who had come to have their photographs taken by the leading artist photographer in the world. They were looking at the specimens of work exhibited.

"Don't you think Strauss is just lovely, May? He's so clever. You think you're having your own way about posing, and all that, and all the time you're doing what he wants and—why he manages a woman just like a woman manages a man."

"Oh, Laura, isn't this a lovely album of 'human documents' of Mrs. Lily Carr Norton—from babyhood to beautiful matronhood. It's the story of her life from year to year, and as it lies there, bound, it reminds me of Mendelssohn's 'Songs Without Words.'"

"And just look at this photograph of Julia Marlowe in her man's attire, as she appears in 'When Knighthood Was in Flower.' Isn't it just the acme of art? It's a profile view, but how fine and strong and brave it looks, and yet it has that same suggestion of humor that the play has. Actually, Strauss can photograph the meaning of a face. It seems to me, indeed, as if

his camera sometimes has an X-ray quality that penetrates to the secrets of character."

"Dear me, you talk like a book. I hope he doesn't X-ray me and find out what a silly goose I am and how much I think of—"

"Percy—oh, I know!"

"Well, yes, of Percy. But, by the way, Percy tells me that Strauss is a wonder for nerve. Would you believe it, Percy says that Strauss was kept up all night the other night, refusing the reporters of all the papers the right to use a photograph of the lady who was recently sued for divorce? He wouldn't give up a picture until he got the lady's permission, and, of course, they couldn't get that. It would have been a great 'ad' for him to give the picture and have it printed with his name attached in all the papers, but he wouldn't do it."

"Speaking of divorce. See this picture of this doll-like little woman here in this gorgeous gown, Mrs. ——. Well, she and her husband are going to quit. They say that she is seen too often with a young bachelor cavalier to suit the husband. Isn't she a dream?"

"Yes, and isn't he a 'chump?'"

"Who—the husband, or the—the other fellow?"

"The other fellow—a 'silly awss,' as the English Lord said in Willie Collier's play, 'On the Quiet.' The husband's a fine fellow. You can see him out there in the hall, in the gallery of immortals. Who is this?"

"That—oh, that's a photograph of Zorn's picture of Mrs. Joy."

"Um-m-m. Well, maybe the picture's good, high art, but it isn't as pretty as Mrs. Joy. Zorn can't draw or paint a woman's picture. His men are fine. But he don't catch a woman at all. I see he's suing Mr. Pierce for $12,000 for three pictures. Well, with Mr. Fred Lehmann in the case the suit should be a feast. It will be like Whistler's suit against Ruskin, and will reek with the wit and satire of 'The Gentle Art of Making Enemies.' Zorn may be a great artist, and if people hire him to paint his style of painting they ought to pay him, but for beauty I'd rather have one of these Strauss artist proof photos than the Swede's 'studies in distemper.'"

"Yes, isn't this artist's proof of Mrs. H—— just like a fine etching? And oh, what a darling baby!"

"The dear!"

"The cute, sweet, lovely angel."

"It takes a genius to photograph children. There's no one I ever saw that could equal Strauss in giving the effect of perfect naturalness to children."

"Who's this little woman with the lovely eyes and the shiny, satin gown?"

"That's Mrs. ——. Poor little thing. They say her husband is cutting up awful. How sad her eyes look."

"Yes, that's it. I tell you that Strauss gets everything in the picture. Ugh! I feel as if I was going to confession against my will, in coming here to get my photos taken."

"Oh! Here's the heroine of the recent elopement. Isn't she pretty?"

"Indeed she is. But why did she elope?"

"Just romance. You know Jack was always spouting poetry. He was intensely romantic. I suppose he is yet. And he was so clever. No one thought he'd ever marry—he was so devoted to a good time. But he's the most liberal fellow you ever saw, and perfectly tireless in social entertainment. He's all right."

"Weren't you rather—well, didn't you like him a little once yourself?"

"Oh, yes, as a friend, but he was too ardent and poetical for me. You ought to read 'Tommy and Grizel,' my dear."

. . . . . .

"This girl looks like champagne and cherries and the toreador tune with a soft pedal."

"Yes, that's she. She's going to marry a warm baby. They say he fights at the drop of the hat, and that there's nobody can drive a midnight hack as he can. It's funny, after your brother tells you about a fellow like this girl's *fiancée* to see him at church with the girl, looking as if he'd never left mamma's apron strings."

. . . . . .

"I wonder if he's in the gallery of 'immortals.'"

"Let's go see."

"Oh, yes, and do show me Harry Hawes. I've heard he's so lovely. And

that Tom Hennings, too. They say he's as handsome as a young god."

"They are all Adonises. I've seen them with Jack Boogher several times. They must all be in the gallery of 'immortals.' You know if you're a man and Strauss hasn't got your picture and your autograph in the gallery of 'immortals' you're not in the ranks of the 'some pumpkins' at all. I don't believe you're eligible to office or to have your name in the paper if you are not in the Strauss gallery of 'immortals.' I wonder why he doesn't have a gallery of 'immortals' for the women; but I guess that the thing would never do. The ones that were not in it wouldn't leave a shred of reputation to those that were in it. And many of those in the collection would be trying to get others out of it. No; on second thought, I don't think a gallery of female 'immortals' would do. An attempt to establish one would create more disorder than the great street car strike."

"Who's the handsomest man in town—no, I mean, barring your bright particular?"

"Oh, well, if you mean a man I'm not particularly interested in, I should say Charlie Galloway, the organist."

"How funny! That's my idea, too."

"Say—what's that? Mr. Strauss wants me? Oh, but I'm nervous. I *hate* to have a picture taken. But Strauss is so nice. And so many people want me to let him take me. Do wait! Then I'll wait for you and we'll go down to the Mercantile Club and get a snack, and I'll tell you the latest about the row between Mr. and Mrs. ——."

And the eavesdropper left as the young lady entered the operating-room to have her lovely self portrayed by the skill of the most artistic photographer in the world.

## THE REDUCTION OF VELOX PAPER.

BY DR. LIONEL M. HOMBURGER.

THERE has always been one drawback in the use of Velox or any other developing-up paper, and that is, no matter how expert an operator one may be, the maximum number of good prints that can be obtained from each dozen sheets of paper is ten. This number will dwindle down to four, or even less, good prints with the tyro.

The greatest trouble that is experienced is the dulling or veiling of the high lights. This is due to two causes—over-exposure and under-exposure. When the print is over-exposed the image looms up so quickly upon its introduction into the developer that the high-lights become clouded before it can be removed therefrom. In an under-exposure, on the contrary, the image becomes but faintly visible, consequently one tries to force the development by leaving it for a longer time in the developer, with the result that the high lights will begin to color before the shadows are dark enough.

After repeated failure on these lines I decided not to do as a great many do, and give up the use of these papers, on the plea that they were too expensive, but I thought I would try to reduce the prints until I got them as I wanted them.

I started by using Farmer's reducer (potassium ferricyanide), and found it uncontrollable, beside being extremely poisonous. When I did get a result I found that it destroyed the permanency of the print. I tried other reducers, and that although they worked better, it was generally more expensive to reduce the print than to make an entirely new one (as most of the reducers will not keep when they are in solution, and must, therefore, be mixed fresh each time one wishes to reduce).

I was about to give up the idea of ever getting a cheap and good reducer, when I came across the "Oxpo" reducer, made by the New York Photographic Company. This is a solution which will keep indefinitely when not exposed to the sun's rays. It is good for reducing paper and plates, and can be used over and over again. I have a pint bottle which has stood on my shelf for over a year, has been used many times, and is still good.

Now as to the *modus operandi:* I take a

print in which the sky is of leaden hue, soak it in water, and lay it, face up, in a tray of reducer until the sky is brightened (this will take from five to thirty seconds); then remove the print and put it into water immediately. Great care must be exercised at this point, for if the print is not removed from the reducer and immediately plunged into water the reduction will be carried beyond the desired point. The print should be washed in running water for an hour, and then dried.

In carrying on my experiments I found that a portrait on Velox paper could be locally retouched by means of the reducer. I took a print of a portrait of a lady whose glasses cast a large shadow under the eyes, saturated the print with water and laid it on a glass plate; took a camel's-hair brush, dipped it into the reducer, and applied it to the shadows as well as to the other imperfections, when, *presto, change*, I had a good picture instead of a poor one! I plunged it in water, and the deed was done.

## OUR PICTURE.

THE picture of "The Friar," which serves as a frontispiece to this first issue of the MAGAZINE for 1901, has several points of interest to the craft. It is the work of Mr. Charles W. Hearn, of Boston, and was one of the three pictures accepted out of six submitted at the recent New England Salon. Thus it helped Mr. Hearn to secure that very desirable honor, the largest percentage of awards in a salon noted for the strength of its professional portraiture. We have a personal pleasure in this, because Mr. Hearn was one of our earliest pupils in photography. Many of our older readers will remember him by his manual on *Artistic Printing*, which ran into a second edition some years ago.

At the convention Mr. Hearn's work was so much admired that he was pressed to publicly demonstrate his methods in picture-making. This, to the delight of all present, he did, posing, arranging, and lighting his costumed model under the temporary "skylight" erected on the stage at Copley Hall. This was one of the features of the convention, of which Mr. Hearn was Vice-President.

The model used in making "The Friar" will doubtless be recognized by many of our readers as Mr. "Ben" Eichelman, the genial representative of the M. A. Seed Dry Plate Co., in Boston and New York, and one of the best men "on the road." Mr. Eichelman, although a young man, has had a long and varied experience in photography. For some years he followed professional photography in Chili, S. A. Later, returning to the United States, he was connected with several of the leading studios, including Morrison's, Steffens, the late Henry Rocher, and Max Platz. Despite the friar's habit the picture is a good portrait of "Ben" Eichelman, his cheery manner and good humor being as evident therein as during a personal visit.

The collection of prints from Mr. Henry H. Pierce, of Providence, reproduces some of the best recent work of this photographer, whose portraiture impresses us as possessing many notable qualities. As these prints show, Mr. Pierce is especially skilled in the handling of men, half-grown children, and "window effects." These latter, as well as the artificial light effects, Mr. Pierce was, we believe, among the first to introduce successfully.

In the other illustrations, by Falk, Ryder, Holden, Schloss, etc., the worker under the skylight will find many useful suggestions applicable to the improvement of his daily work. They have been carefully chosen for this purpose, and a little study will reveal the lessons they offer.

---

IT is reported that the contractors who are building the new "underground" railroad in New York are systematically photographing any building near which they may pass, to aid in fighting possible legal claims. Owners of tumble-down property may attribute dilapidation to the vibrations of boring and blasting, and these photographs, taken "before the event," will refute them. The story seems familiar to us. Surely we have read it many times, and in the press of two hemispheres.

# EDITOR'S TABLE.

*The International Annual of Anthony's Bulletin*, vol xiii., for 1901. Edited by W. T. SCANDLIN; published by E. & H. T. ANTHONY & CO., New York. Since its first appearance, twelve years ago, *Anthony's Annual* has maintained a high character, both in the quality of its reading matter and attractiveness of illustration. The new volume shows a steady advance in both departments, the illustrations being unusually abundant and pleasing. The professional worker will find in its 320 pages a wealth of practical information, of which the article on "Expression," reprinted in this issue of the MAGAZINE, is a practical example. We congratulate the editor and publishers on the output of so useful a volume, and hear with pleasure that it has so far enjoyed a remarkable demand. Typographically the appearance of the book is well worthy of its contents.

---

A NOVEL innovation was made in the Christmas number of *Leslie's Weekly*. This beautiful issue, which is enclosed in a cover printed in ten colors, embraces three fine drawings, by HOWARD CHANDLER CHRISTY, GORDON H. GRANT, and T. DART WALKER. These drawings have been reproduced on heavy plate paper. They are not bound in the number, but are loose, so that each one can be framed. If the supply of the Christmas number at the newsstands is exhausted copies can be secured by addressing the publishers' office, 110 Fifth Ave., New York. (25 cents.)

---

MR. CHARLES E. CRANE, Seattle, Wash., sends to our table a business calendar for 1901, embellished with a speaking likeness of his three-year old, CHARLES LESLIE CRANE, attired in all the glory of "His First Pair of Trousers." The happy youngster looks every inch of the little man he is.

---

APROPOS of our frontispiece in this issue, made on a *Seed* plate, it is interesting to note during a recent visit to Boston how many leading professionals there are enthusiastic users of Seed plates. Thus PARKINSON, in his new studio, GEISSLER, at Mrs. ROBINSON'S studio, and C. W. HEARN are all Seedsmen, and could not be persuaded to change their convictions.

---

ONE of the best portraits of a man which we have seen in some time comes to us from Miss GRACE HARVEY, of San Diego, a pupil, we believe, of Mr. R. H. FURMAN, who was formerly located in that delightful town. We hope to reproduce Miss HARVEY'S work in an early issue.

---

AN exhibition of ivory miniatures by SPRAGUE, with a choice display of miniature portraits by photography, frames, etc., formed a "drawing card" at the D. Rosser Studio, Pittsburg, some weeks ago. Such attractions are profitable advertising and deserve attention.

---

MR. GEORGE B. SPERRY, of Toledo, Ohio, also sends us a daintily printed announcement of a "Loan Exhibit" of artistic portraits of children, held at his studio recently. The collection displayed examples of child portraiture by SCHUMACHER, HOLLINGER, MOSES & SONS, STEIN, KNAFFL BROS., CORE, BRUSH, EDMONDSON, NAST, HOYT, STRAUSS, ROSSER, VARNEY, SOMERS, and others. It was open every afternoon and on two evenings for a week, and was warmly appreciated by hundreds of Toledo's residents. We are glad to see these evidences of intelligent publicity methods in the fraternity.

---

A SCAMP passing as "ARTHUR BURKE," and representing himself as an agent for GILBERT & BACON, of Philadelphia, has caused much heartburning in that city of late. His game is the old one of selling tickets for 50 cents down, entitling the buyer to a portrait made at the home. It is strange that the people of so large a city should be willing victims in so transparent a swindle, but the newspaper reports say that "hundreds were swindled in this way." It is well for the professional to emphasize in his business literature that he has no outside agents or canvassers, and to make this fact public in the newspapers at intervals.

---

OBITUARY.—We hear with deep regret of the death of one of our oldest subscribers, Mr. ISRAEL FORMAN, of Fairmont, W. Va. Mr. FORMAN began his photographic career in 1862, and established himself in Fairmont in 1864. He was twice elected Mayor of his town, and the respect in which he was held by his fellow-townsmen is seen in the following extract from a local newspaper: "No man stood higher in this community than he, and no death could be more deeply deplored. He was a most upright man, and has long been regarded as one of the most noted examples of a Christian gentleman that we had in this city. He was a man of unusual intelligence, but was very quiet and unassuming in his manners. He was a successful business man, and transacted his affairs in such a pleasant manner that it was a pleasure to do business with him. He had no enemies, and everybody was his friend. Only a few days ago while he was passing down street we heard a gentleman remark: 'There goes the best man we have in our town.' The life of such a man is worthy of emulation, for it made the world better, and the reputation he made and deserved, and which will live after him, for business integrity, kindness of heart, broad views, Christian charity, and an upright and constant Christian walk, is the brightest monument a mortal can leave behind." The business will be carried on by Mr. FORMAN'S daughters.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of:

# The modern Developers:

—: Patented. :—

AGFA-INTENSIFIER.

AGFA-REDUCER.

## Imogen:

The **most powerful** developer of all.
Does not **injure** the fingers.
Strictly adapted to the **high sensitiveness** of the modern **gelatino-bromide dry plates.**

## Eikonogen:

**Working very harmoniously.**
Specially adapted for **portrait** and **instantaneous photography.**

## Diogen:

**Elastic! Powerful! Handy!**
Therefore suited for cases in which it is doubtful whether the plate has been correctly exposed.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $0.37 | 1.20 | 2 10 | 3.95 |

## Rodinal:

**a highly concentrated** developing solution for all kinds of photographic work.
Diluted with twenty to thirty times its volume of water, it is ready for use.

| 3 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $0.60 | 1.10 | 2.00 |

## Amidol:

**Needing no alkali,** can be well applied to all kinds of photographic work.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $0.75 | 2.75 | 5.25 | 10.00 |

**Pamphlet on developers, second enlarged edition, free on application.**

Sold by all Dealers.

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

**Manufacturers of**

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 530.
FEBRUARY, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

PHOTOGRAPHING CHILDREN . . . . . 33
A FEW LENS FACTS . . . . . 35
ON BEING PRACTICAL . . . . . 37
THE SINGLE PRINT . . . . . 38
THE ORGANIZATION OF PHOTOGRAPHIC LABOR . . . . . 40
THE BOUDOIR PORTRAIT . . . . . 42
PICTURES WITH FIGURES . . . . . 43
REVERSED NEGATIVES IN PRACTICE . . . . . 45
NEWS AND NOTES . . . . . 47
PHOTOGRAPHING STATUARY . . . . . 49
OUR PICTURES . . . . . 54
PHOTOGRAPHS ON OPAL . . . . . 57
NEWS FROM THE CRAFT . . . . . 58
THE DETROIT CONVENTION P. A. OF A. . . . . 60
THE PROFESSIONAL AND THE MOUNTS HE USES . . . . . 62
NEW CENTURY PHOTOGRAPHY . . . . . 65
THE NEBRASKA ASSOCIATION . . . . . 69
IMOGEN . . . . . 70
THE NATIONAL ASSOCIATION AND CONVENTION . . . . . 71
EDITOR'S TABLE . . . . . 72

OUR PICTURES:

"An Unretouched Portrait." By J. W. Ward, Connellsville, Pa.
Twenty-one Engravings from Photographs by W. M. Hollinger, Schloss, William Gill, Pach Bros., E. D. Evans, W. E. Partridge, and others

EDWARD L. WILSON,
289 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY

Fine money


# MAKE NO MISTAKE

The practical photographer who *feels* the need of inspiration in his work; who wants to *know* what his fellow-workers in the craft are doing; and who wants to *see* what the best workers are doing, must

## SUBSCRIBE FOR

# WILSON'S PHOTOGRAPHIC MAGAZINE

Plain and Practical Information on Practical Work; Helpful Papers on Interesting Topics; All the News; and a Liberal Selection of Pictures Carefully Reproduced and Printed.

*A PROGRESSIVE RECORD OF THE PROGRESS OF PHOTOGRAPHY SUCH AS CAN'T BE HAD ELSEWHERE*

## OLDEST and BEST

**Three Dollars Per Year**

**Six Months for $1.50 Current Issue, 30 Cents**

**Don't Miss a Number**

---

**EDWARD L. WILSON**

**289 Fourth Ave., New York**

AN UNRETOUCHED PORTRAIT
By J. W. Ward, Connellsville, Pa.

# WILSON'S PHOTOGRAPHIC MAGAZINE

*EDITED BY E. WENTWORTH [illegible]*

VOL. [illegible] No. [illegible] FEBRUARY, [illegible]


## PHOTOGRAPHING CHILDREN.

BY [illegible]

[illegible] pretty pictures [illegible] childhood in its [illegible] as well as moves, as now [illegible] the most [illegible] most [illegible] photography. Not that [illegible] does. There are common [illegible] children in most [illegible] audience, though [illegible] greater proportion [illegible] But even the idiot child, [illegible] successfully [illegible] few. [illegible] would [illegible] [illegible] with just a few [illegible] from my own experience. [illegible] few [illegible] may be made [illegible]

[illegible] Do not shoot and [illegible] by [illegible] except [illegible] else keep [illegible] for a [illegible] Neither [illegible] need [illegible] Just as [illegible] so will a [illegible] or [illegible] made [illegible] of [illegible] to get [illegible] [illegible] probably the mother [illegible] [illegible] to answer to as [illegible] [illegible] and [illegible] to [illegible] [illegible] difference [illegible] [illegible] only make [illegible] to the [illegible] [illegible] [illegible]

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. FEBRUARY, 1901. No. 530.

## PHOTOGRAPHING CHILDREN.

BY CHARLES NAST.

To adequately portray childhood in its many aspects, its winsomeness, its innocence, and its beauty, is at once the most delightful and in some ways the most difficult phase of photography. Not that all children are ideal. There are commonplace children in great abundance, though not in greater proportion than among the "grown-ups." But when the ideal child, ideally dressed, is successfully portrayed, it is indeed a lasting joy. To write fully on child portraiture would fill a book, and then the instruction would lamentably fail unless the reader was himself acceptable to children, and had the gift of winning their confidence.

I will content myself with just a few practical hints from my own experience, which may at least indicate a few lines on which advancement may be made in child portraiture.

Avoid all racket. Do not shout and ring a bell, or rattle or whistle at the baby the minute you get it in the chair. Keep cool, and above all else keep quiet for a little while. Nothing impresses a child more than silence and quietude. Just as noise alarms and startles him, so will a little quiet word or two, a little funny squeak of the voice, please and interest him. Do not be in a hurry to get its attention. Generally the mother and a friend or two are only too anxious to assist. Now these I find I must invariably caution to keep still and not to excite the baby or "get its attention" until I am all ready. I generally make no sound and say nothing to the child until I am all ready with the camera and plate holder —in fact, ready to make the exposure. Then, and not till then, do I give any attention to the baby. Then, perhaps, a little rattle or a rubber bird is brought out as a last resort, but these things are all carefully kept out of sight until the supreme moment.

A child's photographic expression is a sad convention. Why this everlasting smile? Surely a baby's interesting moods are not confined to the one with a smiling countenance. He is listening, interested, sad, listless, alert, cross even, and he sometimes frowns, but what of it? Isn't he always just the same delicious bit of study? One of the prettiest things in the recent Milwaukee exhibit was the head of a little girl who looked as if she had all the cares and worry of this whole world on her little shoulders. But what a study it was!

I once enlarged a picture for a patron. It was that of a smiling child showing the teeth. Well, she told me afterward that from being entranced with it at first she grew to dislike it, for it made her jaws ache every time she passed the portrait. She declared she wished to heaven that child would just shut its mouth for a minute.

And this is a serious point. If you do make a smiling picture be sure to have the head small enough. Otherwise there is great danger of distortion and of imparting this same sense of tiresomeness.

Do not rush up to a strange child and smother it with attention. Do not pick it

up in your arms. You might do this with a very young baby, but it is not safe with a child that walks and talks. In my experience it is bad policy. It is also in very bad taste to fondle and caress them, and worst of all to kiss them. This latter is a vulgar and dangerous piece of impertinence. Watch children when they are brought together for the first time. Watch how they cultivate each other. See how adroitly, how quietly, and with what rare sensitiveness they treat each other. And what exquisite consideration each shows the other. To make up with children successfully you must study them and see how they go about it. You may rest assured they do not rush up and ask each other a dozen questions in a fulsome style.

Some galleries use quite a stock of toys and children's furniture for the taking of children pictures; my own experience is not to use any. In very young children giving them anything new (and, of course, a photographer's toys are new to the child) serves as a distraction. In young babies these toys go directly to the mouth, and there is often trouble in getting them back again when baby is quiet. But I speak now more particularly about larger children, say from two to five years old. My objections are chiefly that the addition of toys is on the same plane as accessories in the portraits of grown people. They are apt to become too conspicuous. Again, they do not tend to artistic pictures because the poses are assumed and strained and the pictures are necessarily untruthful. How do children come to a gallery generally? Dressed in their very best clothes of course. Now how silly it is to put the red wagon, and the trains of cars, and the woolly horse and the stuffed cat into a picture of that kind. When they come to the gallery in overalls, or their everyday dress, then it is time to get out their playthings.

Harmony is too often lacking in pictures of children, a fault which should be carefully avoided. Since children come to the studio with their very best dresses, a fine interior ground will be found to be the most useful. Of course, with the youngsters in duck suits, or in yachting togs, or lawn-tennis flannels, an interior would not avail much in the production of an artistic (which is only another word for a truthful) picture. But where there is no distinguishing mark about the costume or other characteristic, plain grounds, or graded grounds, will be found most serviceable. The gray neutral grounds will be found most effective where an interior is not admissible, simply because there is nothing in the background or surroundings to antagonize the whole—nothing to distract the eye from the portrait itself.

Never tell a child in so many words "to smile." This is really fatal to a good resultant picture. You cannot order expressions in children just as you would your steak or dinner at a restaurant. The expressions must be spontaneous. Without this spark of spontaneity the picture will always lack life and freedom from restraint. You may suggest an expression by a word or action, or by telling a story, or again, by pretending to take no notice whatever of the child subject; but never tell it or permit anyone else to tell it to "smile, darling," if you want happy results.

Before attempting to take nude pictures of babies lying on their stomachs and all those other pretty poses—such as resting the head on one elbow—practice the same first at home with baby when he has his daily bath. He will soon develop a certain line of positions quite natural and artless, and also quite peculiar to himself. For the same reason little girls in dancing poses, courtesying, etc., should be taken only when they really have danced a little beforehand. Otherwise the pose is liable to be strained-looking.

Do not fuss about the dress of the baby or child. He may be twisting and squirming about, and if he does disarrange his dress a little bit it only adds a certain charm to the picture. And what is more, this disarrangement of the dress if studied closely is always part of the pose. It is due to some position the baby is gotten into, or to the play of hands or feet, and is, therefore, entirely proper and consistent with the whole *ensemble*. For the same reason do not insist on a certain poise of the head. That is quite a distinguishing mark of very young children, especially babies. It is often the most characteristic point in a child's portrait.

A certain French scientist, I think it was Dr. Michel, who wrote *L'Amour*,

once said, "A young child is never ungraceful. Take a baby, strip it of its clothing and place it on the floor, and every motion is grace itself." For the reason that a baby feels perfectly safe on the floor, and the element of fear is completely eliminated, it is quite possible that the best effects can be gotten when the baby is either on the rug or on a very low stool or hassock. Everyone who has had any experience in photographing children has seen that timid, frightened look come to a child when it was placed on a bench or chair simply because it was unused to standing alone at such an elevation. Of course, by placing children on some pedestal the face comes more nearly opposite the lens, and the picture is consequently freer from distortion.

Every subject must be approached differently. A timid, peevish or frightened child refuses to be pacified by a stranger's handling. Intuitively one must know the timid child from the one which will make up with anybody. Never fondle or caress a child unless you know your ground very well. The best way to handle a child that is clinging to its mother and will not permit itself to be taken away, is to attract its attention first by making some peculiar noise. Not a racket, but the calling of an imaginary kitten or puppy dog will often work wonders. You will notice the child looking for it, too. Then, when the child's attention is attracted to the novel sound let the mother very quietly place it in the chair. But there must be no officiousness on the part of the mother, no pointing of the finger at the camera, and baby's attention must not be distracted from its search for the mysterious sound. Let the child feel at its ease always.

## A FEW LENS FACTS.

BY H. FENNER.

One of the greatest of photographic mysteries is the common lack of any technical knowledge concerning the implements used in the craft. The knowledge possessed by the professional is in some cases very little more than that of the uninformed layman who thinks of the camera as a mysterious machine. On no subject is this ignorance more pronounced than on the subject of lenses. The photographer will pay $200 for a lens when his next-door neighbor buys a lens and camera complete for $5. Of course, there is a reason for this, but the photographer does not fully understand it, and when the lens purchase is made he takes his dealer's word for it, or his editor's, or the advice of some friend. Then when he has got his lens he either concludes that it is no good or that it is the only lens worth possessing.

One of the commonest remarks of some enthusiastic photographer—especially if he do some out-door work—is that he possesses the rapidest lens in the world, and he will glowingly recount how he has stopped it "way down" and yet got overexposure with a rapid shutter. Practically, there is no such thing as rapidity with a stopped-down lens. That is to say, a two hundred dollar lens, which can work at $f/5.6$ will if stopped down to $f/16$ be exactly as fast as the lens in a little hand camera whose "full aperture" is $f/16$. The greater intensity or rapidity of light is caused by the ability of the lens to give a sharp image when there is a large stop in it to allow of a greater amount of light to be passed in a given time. There is no such thing as "rapidity" in water pipes, but a 2-inch pipe has a greater capacity for passing water in a given time than has a 1-inch pipe. That is exactly the difference between the speed of lenses. What is meant by "$f$" values? To obtain the $f$ value of a lens the camera is focused on a distant object, and the distance from the centre of the lens to the ground-glass screen is carefully measured. Then the diameter of any stop divided into the length of the camera gives the $f$ value. Thus, if a lens works with a stop 1 inch in diameter, and the distance between the lens and the ground glass is 16 inches, the value will be $f/16$; and this aperture with this focal length will work exactly as quickly as an aperture of half an inch with

a focal length of 8 inches. Those who know very little about *f* values have sometimes a wrong idea as to their relative speed. *F*/16 is not half the speed of *f*/8, but one-fourth, and *f*/32 is one-fourth the speed of *f*/16 and one-sixteenth the speed of *f*/8.

The covering power of a lens is supposed to vary according to the size of the stop used. This is not quite correct though it is so for practical work. By stopping down we get a finer definition over a wider area, and so a lens which at an open aperture would be likely to show indistinctly at its edges may be improved by heroic stopping down. But there is much to be said in favor of using a lens for the size of plate as recommended by the makers. Many workers will for the sake of economy buy a lens listed to cover a plate a size smaller than the one they use. Then when fair definition is wanted all over their plate they stop down in merciless fashion and obtain their definition together with pronounced distortion and dark corners, where the light does not sufficiently reach. A lens used in this way can never give pleasing work—the distortion is too apparent even to one who knows nothing of lenses. The use of a lens of larger covering power is less of an evil, and many workers will get a lens of this kind to have in case they ever wish to cover a larger plate. Occasionally such a lens is purchased under an erroneous idea that it works more quickly. This mistake has already been explained. But the lens in covering a circle of light larger than the plate used floods the frame and the bellows with an illumination, some of which —however dead black the inside of the camera—will be reflected and tend to impair the brilliancy of the negative. Many who use too large a lens complain of this excess of light. But, of course, this does not hold good to any appreciable extent in studio work where a small size plate is used in the centre of the back of a large camera. The reflection is only serious when it can fall from the bellows direct on to the plate.

The depth of focus is another misunderstood question, and one which, like rapidity, has a direct connection with the size of the stop. On obtaining greater rapidity we lose our definition in different planes, that is, at different distances from the camera. For this among other reasons a smaller stop and a longer exposure are often advisable. The lenses used in studio work, commonly called portrait lenses, differ from other lenses only in so far as their construction is all in the direction of great speed. A portrait lens working at *f*/4 will give complete coincidence of visible and chemical foci. But it lacks depth of definition. A nose may be in focus and the ear fuzzy, and the larger the size of the plate the more is this apparent. For sizes of 7 x 5 or over an anastigmat is often used, for if a portrait lens is used it must be stopped down, quite as much as the anastigmat, to get the required "depth." The portrait lens gives sharp definition over a very limited angle, and has a serious drawback in its distortion. This is a disadvantage more likely to be spoken of in the future than it has been in the past, for as the photographer's patrons begin to notice it more—as they are already doing —so the photographer must avoid it. This will to a great extent be done by using a lens of longer focus. Probably the photographer will in a few years be focusing a sitter twenty-five or thirty feet from the camera. This will mean a wider use of a special adaptation of the tele-photo lens to studio work, and it will also lead to the use of quite a few lenses at present judged effete, or of lenses not primarily designed for portraiture at all.

---

*The question* of the permanency of sepia-toned platinum has been much discussed lately in some of the London societies. The general consensus of opinion seems to be that they are not stable, or at least not so stable, as those of the usual black tones. Now, the platinotype process, where the image is developed with the usual oxalate developers, does yield results that are undoubtedly permanent, and if the prints made of the sepia color, by the aid of mercurial or other metallic salts, are not, it should be more generally known, that is, if it be a fact. Some authoritative statement, one way or other, would be interesting to those who employ the process for this color of picture.

## ON BEING PRACTICAL.

PERHAPS one of the commonest words used in business is that thoroughly expressive, but often misapplied word, "practical." The constant demand in industrial life is for practical machinery, practical men, and practical methods. Practical wisdom rules the trade of the universe, whether it be in the manufacturing or the mere buying and selling of goods. The philosopher whose wisdom is not practical is but a crank and dreamer, and if he attempts to oppose the practical he puts himself very much in the position of the cow which tried to stop the railway train. As George Stephenson said, "It would be bad for the coo." And it would be equally bad for the philosopher. But as there are differences of opinion as to what constitutes wisdom, so there are differences of opinion as to what is practical, and it is a common mistake to refuse to accept new ideas because they do not accord with present practice.

We so often hear the expression, "Oh, it's not practical." It is a phrase that has been lightly said of every great invention and every epoch-making discovery that has been brought before the world. It was said of the steamship, of the locomotive, of the electro-motor, of the printing machine, of the spinning loom, and every other grand conception which has made for human progress. These words, carelessly and sneeringly spoken, have driven brilliant inventors to poverty and despair, and have disappointed and discouraged many a high-souled philosopher, wearing out his life only to make the world brighter and happier.

Ask half a dozen men who say a thing is not practical, to give *practical* and logical reasons for their opinion, and we doubt if one could put forward objections which would carry weight. They might be most able men in their business or profession, yet the difficulty of defining with judicial precision exactly what is practical would preclude them from giving a weighty opinion. It comes simply to this, that any fool can, and does, use the expression, "It's not practical," but it takes a brainy man to decide on what *is* really practical.

Practical wisdom is all very well, but when it sets itself in opposition to all progress, it may be better described as practical stupidity. The practical wisdom which says that "This thing is no good; my father and his father before him got on without it, and I have gone on all right and made money without it myself," is simply senile idiocy.

It is very usual for a workman to boast about being "thoroughly practical," which may be taken to mean that he has become accustomed to the practice of the trade through long experience in old-established houses. But it cannot be too strongly emphasized that length of service does not make the most practical man. He may have become so hide-bound with old-fashioned methods and antiquated prejudices that he has no knowledge which he can profitably apply outside the sphere in which he has moved. He is like the cog-wheel of a machine—removed from its place it can serve no useful purpose, and, as the engineer would express it, can be thrown on the scrap heap. The analogy can be carried further. It is easy to replace a missing wheel, but no one would ever think of building a machine to fit an odd wheel found on the scrap heap or the second-hand goods stall. Thus the "thoroughly practical man," in most cases, wants a place built for him, to suit the circumstances in which he has previously moved, and if he can find some employer foolish enough to do this, it too often happens that he still doesn't fit, and the wheels don't go round, because they are not in gear. You cannot make an old wheel gear properly with a new one; it's generally far better to have two new ones. With new machines and new conditions, it is often expedient to have new men, and employers find it pays to get hold of intelligent youths who have had little or no previous experience, but who are adaptable to the new circumstances.

The fact is, the practical man doesn't count if he has no adaptability. The virtue of being practical consists in applying knowledge or theory to use. It's wasting time to go through life gaining knowledge

unless we have the tact to apply it in all circumstances of doubt and difficulty, and to help us forward in our enterprises. That is where the quality of being really practical comes in.

There is too much of the whitewash and paint brush in the practical work of to-day; that is to say, there is too much tendency to make things look clean and nice which are not really so below the surface. There is a too common tendency to suppose that it is practical to take things as they come, getting rid of things instead of properly completing them, and never doing anything which is troublesome, taking a course which may not be the best and neatest, but because it is the shortest and cheapest. A man who is practical in this sense looks upon many persons as speculative, inventive, and impractical, merely because they are of a searching, inquiring disposition, and are not satisfied with small expedients and obsolete devices, such as serve to conceal the ills they cannot cure. If to be practical is to do things in such a way as to leave a great deal for other people to undo at some future time and at no very distant period, to stick on time-serving patches, and to fancy you have done a thing when you have only hit upon some expedient for putting it off, then by all means give us non-practical people, if only they are of the scrutinizing, painstaking, plodding sort, who do work which is not only good on the surface, but which is thorough to the core. It may take a little longer, or cost a little more, but it is the only work that is really practical. Practice must be based on principle, and the only work that is thoroughly practical is that which is based on sound principles. —*Penrose's Process Work.*

## THE SINGLE PRINT.

THERE is a very commendable custom just coming into notice of treating a photograph more as an individual work of art than as a mechanical production, and fixing the unit at the single print instead of the dozen. This custom is, like so many good things in photography, a revival of an old one, not only of daguerreotype days, but but also of the early carte-de-visite days, when a single photograph, by a good man, fetched several dollars. It is a renaissance which will not affect the cheap man, and in the case of the abler man it is not a change to be lightly undertaken without careful consideration from the business stand-point. It has, however, proved extremely successful in several cases, and where a man has a characteristic individuality he has one essential toward success. Such men as Benjamin, Hoyt, Brenner, Boyé, Spellman, and others are the men who would succeed on such lines—though not necessarily better than they are doing to-day, in which case, of course, a change would be most ruinous. The plan sometimes followed is to make the sitting absolutely free, to show no proofs, only finished prints, and to leave acceptance or rejection entirely in the hands of the customer. Such a plan shows the photographer's confidence in his own work. The finished photographs go out to the customer, who has time to criticise them or grow dissatisfied with them. The natural result would appear to be a great number of returned prints. Such would be the experience of most photographers. But one or two fortunate exceptions have found the reverse. Their pictures are sent out, probably a dozen different prints, from as many negatives, and their customers find something attractive in each one, and cannot decide which to return. So if they are wealthy they keep all or several of the prints, and re-orders are frequent. There are a few essential points in this plan. First, there must be no niggardliness, no dabbling with rough prints. Every one must be carefully finished, and mounted, and enveloped. Every one should, if need be, be signed. And the photographer must be ready to sacrifice his most carefully finished print. There must be no concession in price. It must be a case of take it or leave it, and the customer must feel absolutely at liberty to return all. But if the customer does not wish to pay the full price then the prints must be torn up every time. The unreasonable customer will not prove as frequent as might be

feared. A very pleasant feature of this system is its complete and transparent trust in the work done. It is quietly left with the customer to work its own way, and if it does not make or hold interest the photographer is the only loser. The price is fixed at so much for the first print from any negative, and a lower price for duplicates. If one print is chosen from each of a dozen negatives, it means a dozen first prints. If all from one negative, there will be one first print and eleven duplicates. The price would be fixed according to locality and to the size of the city. A first print might be anything from $2 upward, and duplicates from $1 upward. (These prices appear about the very lowest at which such work should be done.)

Another system which has proved successful and which should have a wider possibility than the foregoing plan is to make a fixed charge—usually about $10—for a sitting. This charge includes from two to five prints, which may be from any of the negatives selected by the customer. Proofs may be selected from—this should be done by the customer during a call at the studio —no proofs being sent out. Here, too, the number of prints supplied for the original charge, and the price of duplicates, are matters for individual decision. The question of size, too, may or may not determine price. Some photographers will not make any variation in price for any print under the size of say 5 x 7. They will use a plate of this size, and whether they decide that 2 x 3 or full size will make the best print, the labor of printing and mounting will be the same and the extra cost of the paper

A plan which seems to be finding some considerable favor is to work with the single print as a cut-rate leading line. I do not believe in cut rates anyhow, but leading lines are all right, and it is much better to sell a single platinotype print, neatly mounted and framed, for $1, than to sell a dozen cabinet prints for 99 cents. The idea is worth considering as a business bringer. Try some little specialty instead of merely supplying the old lines at special low rates. The idea of supplying a single framed picture, with duplicates (usually merely mounted and not framed) at a reasonable rate, is as profitable and more satisfactory in a business way, than to "give away" a frame with every dozen prints. The novelty may be fitted to any grade of business. One energetic little man in an Indiana town has made quite an excitement with passe-partouts. Discarded 5 x 7 negatives are carefully cleaned, and the glasses used to cover a smaller print mounted on some light-colored mount of 5 x 7 size. A second piece of mount is used as backing, and this piece is first pierced in two places and a tape passed through, making a loop to hang the picture, the ends being firmly and flatly glued down. The two cards and the cover-glass are then firmly bound by a narrow strip of binding paper, and the mounting adds twenty cents to the price of the picture in a community where money is scarce and extravagant spending is unknown.

Any special line should be carefully considered before being ventured on. In the case of the man whose secret is the quality of his work he need not always fear competition, though it is very easy for a clever man to imitate, sometimes with a very considerable degree of skill. Where the line is some novelty of mount or frame or style it must not be one that a rival can exactly copy by merely sending an order to his dealer. But in every case, unless the man can decide for himself exactly what is the best line for his locality, he may consider that he is not the man to venture on any special line of single prints.

---

*The December* issue of *The Photogram* introduces a special and commendable feature. Under the heading "Photo-Facts" it compiles from the various magazines issued during the year twenty pages of useful notes or reference to where longer articles may be found. The compilation is arranged under various heads: Apparatus and Materials; Field and Studio; The Negative; The Positive, and Color Photography, and these are further subdivided. "Photo-Facts" is a good thing and may be the germ of a better. The American agents are Spon & Chamberlain, New York, and anyone sending fifteen cents for this special issue will be more than satisfied.

# THE ORGANIZATION OF PHOTOGRAPHIC LABOR.

BY JOHN A. RANDALL.

AFTER the subdivision of labor, the most important consideration in the economy of production is the organization of the workers, the system upon which they are applied to their various duties, so that each member may fill the position in which his capacities find their fullest scope and are made most productive. Necessarily this means that to a certain extent each worker becomes a unit, a detail, in a mechanism designed expressly to employ his productive powers to the best advantage, and with the minimum waste. The primary requisite in such a system is the concentration of the workers into as small a space as possible consistent with the demands of the particular activities about which they are occupied. Here we find the reason of the factory, the busy hive, where large numbers of workers are placed within a confined area.

In the early days this concentration was carried to such an extremity that the health of employés suffered through overcrowding, nor was it remedied until governmental action was taken, and various Acts of Parliament to regulate the management of factories were passed. The principle underlying this injurious action on the part of factory owners is right enough, provided due attention is given to the health of the workers. Taking this precaution, concentration can be enforced in all cases with every advantage in aiding successful production.

Examining photographic workshops in the light of this principle, it is found that the majority defy it in every particular. Thus we have operators at the top of a house, retouchers on the second floor, mounters and spotters on the ground floor, and printers in the next street, or several miles distant from the main establishment. Even in the single department of operating it is no unusual thing to find the studio on the housetop, and the dark room in the cellar; or, again, the printing done at the end of a long garden, and the toning, mounting, and finishing in the front premises. When assistants are so distributed loss of time and waste of labor power in passing from one department to another must occur, beside delay in handling negatives from operator to retoucher and from retoucher to printer. When workrooms are separated the actual time occupied in going from one to the other may be small, but, even though small, it will amount to a check on the course of work. Practically, it comes to paying operator, retoucher, or printer £2 or £3 per week for running up and down stairs and passages, which is too high a wage for labor that is not directly productive. Even supposing a messenger is employed for this service it still remains unproductive labor, and therefore his wages represent a loss. These few instances may illustrate the importance of concentration of skilled labor as a factor in economic production.

Another advantage arising from the close union of assistants is that the charges upon management are thereby reduced. When various departments are scattered the supervision cannot be so close as when combined, and, especially in large factories this becomes a matter which makes a difference in the cost of management. Even in a small photographic establishment the principal spends much time merely in making inquiries of and giving orders to his employés, and all time thus wasted means that his services are taken from productive to perform unproductive duties that yield no profit.

It follows from this that the arrangement of a photographic house of business is a question worthy of attention, since it may exercise a great influence in determining whether the balance at the year's end is on the right or the wrong side; at the least, it is economically unsound to carry on photographic production in premises where separation of the various branches is compulsory. The workers properly related, the next essential is to direct their energies in the most profitable channels, and to allow no deviation which would tend to disorganize or throw the whole machinery of production out of gear. The

first point to insist upon is that the highly skilled and highly paid assistant should be put to labor requiring such skill, and that the less skilled and less paid be allotted and kept to functions in accord with their capacities and rate of pay. To occupy operators, retouchers, or printers, in performing inferior services that might be done by a lower type of mechanic, or by unskilled labor, cannot lead to an economy, but is rather inviting a financial loss. On the other hand, it is also wasteful to reverse their positions, allowing printers to retouch, retouchers to act in the studio, and operators to exercise the privileges of management. These perversions are contrary to the orderly conduct of business; in the first case it implies a loss to the employer who cannot find sufficient work to fully occupy the time of an operator and retoucher in those duties for which they are trained and paid wages in accordance with the high skill demanded; in the second instance it is not economical to pay any employés for services which are inefficient, since by doing so they are overpaid. The principle to bear in mind is that a worker should be allowed to do only that at which he is thoroughly competent, otherwise, whatever his salary, he is overpaid.

Next to knowing what a man can accomplish is the question of how much, that is, of gauging the amount of produce he can be expected to finish daily. Evidently, if a worker does less than his powers are capable of he is employed at a loss, but it is not so obvious, though none the less true, that when his powers are overstrained he becomes unprofitable as a factor in economic production. It is a common fallacy with employers to believe that the working capacity of a man can be indefinitely increased either by persuasion or compulsion, and thus by bringing sufficient pressure to bear the output of one man can be made equivalent to that of two men. Man to man, perhaps the working powers vary, though taking men in the mass, the maximum that can be expected from them is a fairly constant quantity. To give an example: In a photographic printing establishment employing some thirty printers, working under the same conditions, it was found after repeated observation that their capabilities ranged as under: One printer marked 500, two printers marked 400, twenty-four printers marked 300, three printers marked 200. From this it is seen that while the best printer could produce two-and-a-half times as much as the worst, the larger proportion, 24 out of 30, fell under the same head as regards their powers of production, indicating a limitation of capacity. They were, as a matter of fact, incapable of doing more. Supposing, however, compulsion were tried to compel them to reach the 500 limit, by lengthening hours or by closer supervision, little would result, for it has been proved in other industries that long hours do not mean an increased output. Extra supervision also fails, because, though the output may increase, the gain is outbalanced by the added expense of the overlookers. In the end it is better to recognize that the producing power of men in the main is a fixed quantity, and that it is essential in the economic organization of labor to estimate the average capacity, to apportion the work, paying wages in accordance.

Another requisite in the profitable employment of labor is a regular and systematic method of working; this demands stability of management, leading to steadiness of occupation and uniformity of output. Instability of management reacts on the employé, weakens his powers, and reduces his efficiency. Owing to the numerous processes now used in the photographic trade, a breaking of the continuity of production has become quite customary, an operator, for example, being changed almost hourly from enlarging to out-door operating, then to studio work, and again to making gelatino-bromide prints. With such breaks as this implies the productiveness of a worker must be curtailed, and the value of his services much less than if the whole day were spent in pursuing a single object, the effect on a business being that wages are made a greater charge on cost of production, and, consequently, profits are lower.

Steadiness of purpose, though at variance with the notion of a servant, is a powerful aid toward the successful conduct of employés. It is a wrong policy to be continually altering the course of work, methods of manipulation, or rearranging meal times and hours of working. Many employers

also contract the habit of taking a worker from an unfinished task to commence another, repeating this again and again until at the day's end nothing marketable has been produced. With a sound economy, continuous effort until a given task is completed should be the rule in place of the indecision and feebleness characteristic of the management of many photographic houses.

An action that destroys systematic procedure is frequent experimenting with the numerous plates, papers, etc., now manufactured. Photographic labor is an expensive commodity, and when added we have the cost of plates, etc., used in the experiments, it is evident that some solid advantage should be in view, or otherwise a serious loss in wages and material must be met. In all cases the photographer needs to distinguish between what is experimental and what is productive work. To facilitate the organization of assistants the employer should have every confidence in them; that is to say, their work allotted to them they should be left to execute it; if workmen cannot be so left then production will never be profitable, because the cost of excessive supervision, as with slave labor, outbalances what profit is made on their labor.

At the present time the employer undertakes the sole responsibility of the organization of labor; as manufacture increases in complexity it will be thrown largely on the workmen themselves. In a trade union this is admitted, and one of its duties is to classify and fix the capacity and functions of its members. Assuming that trade-unionism became general, the productive power of the nation would increase, since the employer must find it more economical to deal with employés already organized than to perform the task himself.—*British Journal of Photography.*

## THE BOUDOIR PORTRAIT.

BY THOMAS H. EGGERS.

We are living at fever heat in regard to novelties. Every photographer who aspires after fame (and dollars) seeks out some new invention and straightway labels it artistic. The man whose soul does not rise above the orthodox dozen cabinets is left to grub. We cannot all of us be leaders. We cannot all make a leading line of carbon, or even of platinum, nor can we adopt the very, very satisfactory Hollinger method of "five dollars each, and if you don't like them you may leave them." For every man who attains a measure of success, as Spellman or Kough, there are a hundred who are unknown; and there are fifty quiet workers for every-one who sends work to the convention.

This, in the nature of things, must ever be so, and he who gauges real success by its wideness of application will give more thought to the prosperity of the hundred than to the one.

The title to this article is, I fear, something of a fraud. If it suggests something new it fulfils its purpose, but in reality the suggestion I make is merely an adaptation of a rather old (and not very artistic) specialty. But is not all photography a utilizing of what has been, much oftener than an unearthing of something new?

The Boudoir Portrait is a suggested name for a portrait enclosed in a border, floral or otherwise. The idea is old enough, and "border negatives" can be bought from any stock-house. But the suggestion here is that the photographer make his own, and so make them that he may have something refined and distinctive, not commercial and commonplace. Flowers, more especially tree blossoms, are the favorite subject. If the photographer is an artist with the pencil he might make a sketch of large size, but of few lines, and photograph it down to the required size, and so get a sketchy design. To make a negative "from life," arrange the necessary flowers or branches on a white sheet of the proportionate dimensions of a cabinet print. They must be arranged in such a way that a space is left into which the photograph may be printed. This arrangement will be successful or not according to the skill and taste of the photographer. It may be a delicate spray of bramble in one corner

just drooping down the side of the print with a stray bit straggling along a second side. It may be an arrangement of apple blossoms, perhaps running diagonally across the picture, with the portrait vignetted in the centre. A good plan to ensure the correct size of opening is to mark one on the sheet of a proportionate size, be it round, oval, rectangular or other shape. Or, if desired, a frame might be placed in position and around it the flowers or other objects be arranged or draped, and the portrait be afterward printed as though enclosed in a frame. Such is the suggestion, but to be successful it should be localized. Let the border appeal directly to the experience of the customers. Take Kansas, for instance, the border which at once suggests itself would be, not a delicate drooping spray of trailing ivy, but a stiff, erect, uncompromising spear of corn. A hill of several spears might well be copied when the corn is fully hard and just before the first touch of frost has given a rustling dryness to the leaves. One or two of the ears might be slightly stripped to show the hard kernels peeping through. If such a side design were strengthened by a few ears of husked corn scattered along the bottom of the print it would be a drawing card in many a farming section. Or, instead of the loose ears, place a large pumpkin at the foot of the corn and let its vine stretch along, and you have a border which would be acceptable to all American-born people, whether in town or country. In many sections grapevines could entirely cover a mount except where the portrait came, or down South fluffy cotton pods would be popular. Every strip of country might suggest some local crop or object which would attract attention.

There is another and somewhat different line which was some years ago very successfully worked by a New England man. He was very fond of selling views with a portrait printed in one corner. I believe he made quite a little money from sailors, giving them prints of their ships, or of some ship, with their portraits in one corner, much as we saw the captains with their vessels in the Sunday newspapers during the Spanish war. A local view of the church or of some industry might take the public notion; it would at least help the sale of some popular pastor. There is a custom among etchers of placing some little thumbnail sketch just under their work, to appear on the otherwise clear margin of the mount. With the broad mounts so much used to-day, especially if vellum or some light cream paper were used, it might be possible to do something similar. Just a little suggestion, in a tiny vignette at the bottom of the mount. But this, if it is essayed, must not be for a cheap trade. It must not be a little picture pasted to the mount, but the mount will have to be sensitized just there, and the print made on it.

## PICTURES WITH FIGURES.

"Most anything in the sheep line goes just now," said a well-known photographer recently. "I made eleven negatives last week and have taken an order from every one of them."

We have only to look in the windows of the print shops to see the popularity of sheep, and at the same time to see the general poverty of photographic work along this special line of subjects for print shop trade.

Have you ever noticed how photography and imitations of photography occupy a mean and low grade position in these stores? We have half-tones, usually horribly printed, in imitation of platinotype or of bromide paper. The shadows are smudges, the lights bare paper, and the half-tones lacking. Such work, however, is out of the line of the photographer, and does not need our attention at present. But how about genuine photographs—pictures—in these stores. We see them, lots of them, but they fall into two classes. Either they are set figure subjects, weak in execution and false in sentiment, or they are mere glimpses of scenery or of animals, without glaring fault and thoroughly commonplace. When a man sets out deliberately to illustrate some hymn or some popular sentiment and in a manner for a large sale he undoubtedly fills a niche in the

market, but he puts himself on a very low grade. To illustrate in this kind is beyond the power of most. Landy was perhaps the least unsuccessful of these, but he essayed tasks which had better have been left undone. When we see one of his "masterpieces" we honestly admire the solid hard work which he has put to the making of it, and we admire his technical skill and his careful and tasteful selection and arrangement. But the picture has no emotions for us; we smile at the story or the motive of the picture while commending the handiwork, and we keep it merely as an example of Landy.

There are a few photographers who make a living by making these out-door glimpses of scenery, but there is a much better field for these photographers, and for others, in the line of greater human interest. Everyone who has essayed "pictorial" work—as the amateur calls it—knows that a landscape with figures is among the hardest of subjects; but pleasing pictures are easily obtained. The work is the snapshot work of the amateur, plus a little careful selection and discrimination. The amateur goes down to the water-front and snaps half a mile of shipping; the professional may get a bit of a few bales of cotton and a bowsprit. The amateur shows the whole farm; the man hunting for a picture gets it in the corner of a lot or under the shade of a straw-stack. Every city has not only abundant material but also a market for the record of the material. Many years ago, in Europe, where districts are like a pocket edition, and much scenery or interest is compressed into a few miles, pioneer photographers went the rounds of famous localities and made series of photographs for sale. Some of these photographs have been known for half a century, and year by year photographers go and place their cameras in the selfsame spots and reproduce the very same pictures.

To be successful in out-door work with figures, the photographer must not be an imitator and he must not be a *poser*. His pictures must not be photographic in the common and unfortunate acceptance of the term. Above all they must be *natural*. The work should be hand-camera work. Perhaps the best camera would be a twin lens, or some similar one giving a full-sized view of the picture, and although 5 x 7 would be the best size, a 4 x 5 would be sufficiently large, for such a picture could be enlarged to 8 x 10 and printed in platinum or some similar process without too much loss of detail. The work should be done in bright weather and the lens should be stopped down sufficiently to give full depth of detail; if cows are feeding in a meadow let the further fence or edge of woods be distinctly seen. Undoubtedly the best selling subject is something human. Who is there who has ever gone off for half a day with a few friends who has not seen at least a dozen possibilities for pictures. With a camera and a seeing eye pictures could be obtained which would be immensely more popular than either studies of sheep or "bits" of scenery.

It may seem somewhat unnecessary advice to suggest using a hand camera and quick exposure; the professional worker despises it as fit for the amateur. But the figure work which has been done with the stand camera is often pathetic in its awkward consciousness, and there is room for better and for more natural work.

Let the photographer go into the fields, or let him go fishing with a few friends or a few children. Do not let him go out of set purpose to obtain a foreordained picture, but let him go prepared to look out for some happy chance, such as will occur a dozen times. He will find it work by no means all blanks; he will find it (if he be the right man for it) congenial work, and he will find that he has struck a new vein of selling pictures.

---

*According to Mr. Agar-Baugh*, lenses constructed to work with small apertures give sharper images than those of large apertures well stopped down. A lens, therefore, working at $f/16$ should be better than one with a working aperture of $f/7.7$ stopped down to $f/16$. This is attributable to the fewer reflections and less stray light in the camera, due to the lenses being smaller in diameter and thinner, and with fewer reflecting surfaces. Reflection in the camera is a trouble also to all who use a lens of too large covering power.

## REVERSED NEGATIVES IN PRACTICE.

THERE cannot be a divided opinion, says the *British Journal of Photography*, as to the increasing taste for photographs in other than the orthodox photographic color. In all exhibitions we find reds, sepias, browns, blacks, and other colors in strong evidence. Also in professional portraitist's showcases and reception rooms we see pictures in different colors, and on papers with different surfaces, made a specialty of, and this may be taken as a conclusive proof that this class of picture is appreciated by their clientele. Seeing this is the case, it becomes a question as to which is the best and simplest method of producing them? It goes without saying that both points are of importance, alike to professionals and amateurs, for it must be admitted that both, while desirous of obtaining the best results, like to obtain them with the least possible trouble.

For blacks and sepias the platinotype process fulfils all requirements, but with it we are confined to these two colors. With bromide papers and those of the Velox type we have the means of obtaining a great variety of colors, but they both require a modified method of development, with very accurate exposure to obtain them uniformly. With these papers a variety of colors may also be obtained by after-toning with uranium or other agents, though perhaps with questionable stability of the pictures. Still, the methods are practicable enough. Now, although it is easy enough with these papers to produce a great variety of colors, it is not quite so easy to produce a number of prints all of the same color—a given tint. Every professional knows quite well how difficult it is to supply a dozen cabinet portraits all the same tint, say in red chalk, for example, as selected by the sitter, unless he has a very careful and skilful printer; and, even then, there is often a number of "wasters." With amateurs the exact tint is not of so much importance, as with them often "variety is charming."

How, then, is the greatest variety of color to be obtained with the greatest degree of certainty, and by the simplest means? There is but one answer to the question—the carbon process. With that any color whatever may be obtained with the certainty that all the prints will be of a uniform color, and, what is more, they may be obtained on any surface paper if the single transfer method be followed, for the double transfer is not well suited for rough papers, and it is more trouble in practice, as it involves an additional operation. The single transfer method, however, involves the production of a reversed negative, otherwise the picture will be reversed as regards right and left. It has been stated that this does not matter with portraits, but that is a mistake, as every portraitist is aware. Hence with the single transfer method, which is simplicity itself, a reversed negative becomes imperative, and that brings us to the point, How is that best or most easily produced?

There are many ways of producing reversed negatives. It may be done by reproducing the negative, say by the powder process, by taking advantage of the reversing action of light, or by reproducing the negative through the agency of a transparency, etc. But all these methods are more or less troublesome, and require some considerable skill to obtain the best results; for this reason they have been but little practised by portraitists or by amateurs. Another method, which is most generally followed by those who make reversed negatives for the mechanical processes, is to take the negative directly reversed by the aid of a prism, or reversing mirror. This method, however, does not commend itself to the portraitist or to the amateur. The latter, if he uses any of the rollable films—stripping or otherwise—has at once a negative which is both reversed or non-reversed, according to the side from which it is printed. But these films are, for the present at least, not likely to find much favor with professional portraitists.

Reversed negatives are, however, easily obtained by stripping the film of an ordinary negative from the glass. This is looked upon by some as a difficult and risky operation, while it is nothing of the kind. It is simplicity itself. Premising that the negative has been alumed, or treated with formalin, to prevent the film from curling or ex-

panding when stripped, what has to be done is this: Place it on a levelling stand and pour on some enamel collodion so that it is about the thirty-second of an inch thick. This by reason of its thickness will take an hour or more, according to the temperature, to thoroughly set. When set it is placed in water to wash out all traces of the ether and alcohol. It will be found more economical, and save time, if some more pyroxyline be added to the collodion, as then a thinner coating will suffice, and it will take less time to set. After all the solvents of the collodion are washed away a penknife is run round the margin of the plate to cut through the films. It is then put into water, to which a few drops per ounce of hydrofluoric acid have been added. In a short time the film will begin to detach itself from the glass, when it may be lifted off and placed on blotting-paper, or on a sheet of glass, to dry. We then have a negative just analogous to one taken on a rollable film, which can be printed from either side as desired.

A method which will probably commend itself better to the professional portraitist is that of exposing the plate in the camera with the glass side next the lens, of course making allowance for the thickness of the glass after the image has been focused. This is not a difficult matter, seeing that the dry plates now supplied are, of a given batch, all of practically uniform thickness, a very different condition of things from what prevailed in the earlier days of gelatine photography. The glass is also practically free from air-bubbles, which would show in the picture. It need not be mentioned that the back of the glass must be cleaned from any emulsion that may be on its surface before the plate is put into the dark slide. But, with the perfection of modern coating machines, this is a very trivial matter.

There is no more difficulty in developing a negative taken through the glass than one taken in the usual way, if the first appearance of the image—which will be rather longer in showing itself—be watched for from the back insted of the front. Its density is, of course, judged of in the usual way. There are really advantages in portraiture in taking the negative through the glass. One is that halation from the back of the plate is avoided, which often shows strongly in portraits, as when there is, say, white lace on a velvet or black dress, for few portraitists back their plates to avoid it. Portraitists who make a specialty of pictures in different colors would often do well to take two negatives—one through the glass and the other in the usual way. Then either could be employed as occasion required—dry plates are cheap enough nowadays.

Although the latter remarks are intended more particularly for professionals, they apply also to amateurs. They, when they desire to produce prints in various colors, may also expose the plates through the glass, and thus secure reversed negatives without after trouble. They will then have negatives from which they can obtain prints of any desired color or tint, with the certainty of getting them all alike, without the trouble of after-toning, and of assured permanency of the results.

---

*Film Enlarging.* There is something very alluring in making enlargements by the expansion of the film itself. The negative is laid on in a solution, and soon begins to frill and pucker in most unholy fashion. At last it floats entirely from its support, a larger glass is carefully placed under the film, which is enlarging all the time, and glass and film are removed to a basin of water. The film is spread evenly on the new glass by the finger or a camel's-hair pencil, and the operation is then complete, the plate being stood on end to dry, as usual. The method is familiar in England, and depends upon the stretching of a film loosened by hydrofluoric acid. The formula for the stretching solution is given as follows:

| | |
|---|---|
| Hydrofluoric Acid | 1 part. |
| Citric Acid | 4 parts. |
| Glycerine | 1 part. |
| Acetic Acid (glacial) | 1 " |
| Water | 32 parts. |

All by weight.

*When in doubt*, get out your file of WILSON'S and hunt for ideas; when you want to study posing and lighting spend an hour with *Mosaics, 1901.*

## NEWS AND NOTES.

*An ingenious method* of doctoring flat negatives is one first suggested some ten years ago by Herr Doll, of Karlsruhe. The negatives to be treated should not be varnished; or if already so treated, the varnish must be removed beforehand. The process consists essentially in coating the surface of the negative with carmine ink—a solution of carmine in ammonia. If the negative be flat throughout, without any boldness worth mentioning, it is at first soaked for a few minutes in plain water, and then placed in a dish containing real carmine ink diluted with equal parts of water. The plate is allowed to remain in this bath until its film has been sufficicntly saturated with the dye, when it is removed and thoroughly washed. The dye taken up by the gelatine film is not removed by the subsequent washing, and the negative comes out with an entirely uniform, beautifully transparent coating, which may be obtained in any desired gradation. Should it be desired to remove the dye from some portions of the film, it is only necessary to pass over these portions a fine brush saturated with a dilute solution of *eau de javelle* (1 : 2 water), and to rinse them at once very thoroughly with water. If the negative shows, however, only partial flatness, it should be treated as follows: The plate, while still wet, is placed between smooth blotting-paper and wiped off slightly; then it is laid horizontally on a larger glass plate, which rests upon two small blocks or boxes. Beneath the negative and the glass plate a mirror should be adjusted so that the negative is uniformly well lighted by it. The diluted carmine ink is now applied to the flat portions by means of a large brush, care being taken that the outlines are not exceeded, and that the work is done quickly. The solution is allowed to act upon the film for a few minutes when it is removed by means of a soft sponge. The plate is then washed, and, if required, the process may be repeated once or several times after the plate has been again slightly dried between smooth blotting-paper. If it is intended to produce a soft vignetting gradation, diluted carmine ink (about 1 : 3) is applied to the plate while still wet by means of a large brush, and the plate rinsed with water after some time, the portions which are to be rendered denser being afterward treated repeatedly with the ink.

*Our contemporary, The Age of Steel,* speaking of the trade journal and its special adaptability to the class it caters for, says nothing can take the place of the trade paper in this matter. The average newspaper has neither room nor inducement to specialize on strictly technical matters. The general public demands something more savory and sensational, and has no direct interest in what is being done in a machine shop or a shipyard. The taste for spiced viands has to be gratified, and a yacht race or a prize fight, a sensational crime or a scandal, is a raker in of dollars and a feeder of popular patronage. The trade journal is not a laundry for politicians, and its patrons are restricted to industrial circles. In this lies its special virtue. It has one object and it sticks to it. If a manufacturer wants a machine or mechanic, or latest improved tool, he has but to consult his trade journal to get in its pages what he cannot get elsewhere. He can make his comparisons of costs and efficiency, can place his orders at the price of a postage stamp, and with a pen or a typewriter can in a few minutes make and close important transactions. It is the trade journal that makes this possible. Otherwise the sales agent or the vagrant circular and a mail-bag of inquiries would be the time-eating and money-eating conditions of locating a manufacturer and getting a full text of his specialties. It is this feature of the trade journal that makes it the best advertising medium of modern times. It brings buyer and seller in closer contact. The arrow goes straight to the mark. If a pump is needed, or a windlass, a lathe, or a drop hammer, an anvil, or a camera, the advertising of the same in the trade journal is frequently the only up-to-date directory of places and persons where such can be had. It goes without the telling that most of the sales of tools and equipment are brought about by advertising literature in trade journal-

ism. This fact in many instances ought to be more appreciated than it sometimes is at the selling end of modern business.

*To Avoid Stained Fingers when Using Pyro.* Soak the finger tips in a cold saturated solution of citric acid for about one minute, then rub with a nailbrush which has been damped, and then well powdered with chloride of lime (CaClOcl). Chlorine is evolved, and being in the "nascent" state acts more powerfully than usual. A certain amount of heat is produced in the process—hence it is best to use the citric acid solution cold.

*Pinhole Photography.* Before one of the Scottish societies recently Mr. J. B. Thomson gave an illustrated talk on *Pinhole Photography*, which seems worthy of notice. The pictures exhibited by Mr. Thompson surprised his audience by their unusual quality, or, rather, we should say, their similarity to photographs made with lenses in the ordinary manner. Many examples of landscape work, interiors, copies of pictures, stereoscopic views, and lantern slides were exhibited. Mr. Thomson referred to the statement recently made by a camera-maker that twenty minutes' exposure was needed, and pointed out the absurdity of this. He stated that he had found one and a half seconds in summer for sea and sky views enough, and twenty-four seconds for dark objects in shade. The lecturer's cameras—made by himself from cardboard at a slight cost—were handed round, and their adaptability for upright or horizontal pictures, or stereo pictures by using various holes, explained. Mr. Thomson has also made successful panoramic pinhole photographs with a curved film. He claims that the results of the pinhole process, as contrasted with the hard sharpness so often seen, are nearer to nature, and give a softness of detail and depth of focus, beside reproducing more accurately the effects of atmosphere and distance. His experiments have also convinced him that the idea that the size of the hole depends on the focal distance is false, the only difference found on varying the focal distance from two to eight inches being in the size of the objects reproduced on the plate. The one limitation which the lecturer admitted in regard to the process is that moving objects and snap-shots are not obtainable. In other respects the pictures exhibited showed results and a range of subjects quite equal to the collection of the ordinary workers using a lens. Unless we are mistaken, Mr. Pirie MacDonald is one of several professionals who have recently taken up this interesting phase of photographic work as a relaxation from the strenuous life under the skylight.

*A method for making reversed negatives*, which was described some fifteen years ago by Mr. Thomas Bolas, seems to have been forgotten, and is worth remembering. The process is simplicity itself, and has the advantage of economy, inasmuch as any old, stale, or light-struck plates may be utilized for the work. All that is necessary is to immerse the plates in a weak solution of bichromate of potash, dry, and expose under the negative to be reproduced till a strong image can be seen at the back. The plate is then well washed to get rid of the bichromate, and exposed to light. It is then developed with the ordinary developer. Although the method is so simple, the results are all that can be desired.

*Photographische Chronik* gives the following etching formula for making fine ground-glass screens. Thoroughly clean and wash some old negative glass, and immerse for a few moments in a 20 per cent. solution of barium nitrate. Blot off the surplus moisture and immerse in a 20 per cent. solution of sulphate of magnesia. Gradually a fine grain appears, and when a sufficient degree of density is reached wash the plate well, rub with a wad of cotton and let dry.

*An English paper speaks* of "the depression in business circles generally due to the South African and Chinese wars." Our British cousins seem to have suffered considerably in internal trade during the last twelve or fifteen months, and not from any real depression, but merely from lack of confidence.

*Tar*, containing a little tallow, spread very thinly and evenly on the outside woodwork of a studio will prevent leaking.

PORTRAIT
By W M. Hollinger, New York

PROFESSIONAL PORTRAIT
By Schloss, New York

PROFESSIONAL PORTRAIT
By Schloss, New York

COSTUME PORTRAIT
By William Gill, Colchester, Eng.

COSTUME PORTRAIT
By William Gill, Colchester, Eng.

PORTRAITS BY PACH BROS.
New York

A NOVEL EFFECT
By E. D. Evans, Ithaca, N. Y.

AFTER THE DANCE
By W. E. Partridge, Brookline, Mass.

GROUP SURMOUNTING A MURAL MONUMENT.

# PHOTOGRAPHING STATUARY.

BY CHAS. W. CANFIELD.

*Illustrated with views in the Campo Santo, Genoa.*

STATUARY makes a most attractive subject for the camera in all and each of the various forms and types which offer themselves; many are the attempts to do justice to the originals; only too few are the results which may be counted genuine successes.

Some of the reasons for this state of affairs are evident when the conditions are examined into. In these modern days it is one of the rarest things in the world to find a piece of sculpture adequately and properly lighted, at any rate for photographic purposes. The examples which are placed in the open are almost always located in conformity to the plan and orientation of the surrounding streets, buildings or plots.

The sides of the pedestal are made parallel to some real or imaginary border or axis; the front of the figure or group must face toward or away from the building with

UNDER ONE OF THE ARCADES.

which it has relation—and all without a thought being bestowed on whether or not the prevailing light is a "trying" one. There are, consequently, many noble works of art to which it is impossible to render complete photographic justice in the locations where they are now placed, because the exactly right conditions of lighting cannot be secured from the view-point which best renders the sentiment or action of the work. But inasmuch as an important part of the training of a sculptor is devoted to the difficult task of making the lines of his figures "compose" from all sides, it is usually the case that the photographer can catch some aspect of the subject sufficiently well illuminated to make a satisfactory record when helped out by the imagination of the beholder.

Even in museums and art galleries the conditions are less favorable than one would expect, owing chiefly to the lack of room for using lenses of sufficiently long focus. Only in the case of the Venus de Milo, in the Louvre, are there no drawbacks, for this gem of antique art has a setting worthy of its fame, in a room at a corner of the building. Light comes from the ceiling, two long corridors lead into the room at right angles, with the Venus at the end of the vista; and an arrangement of rollers enables the statue to be turned on its pedestal, and thus perfect lighting in any position is possible. This accounts for the superb photographs of it, which are so well known, and which have in turn spread abroad its renown, so that in the event of a catastrophe to the original it could very likely be reconstructed from them. If only we might have had similar records of the Athena, of the Parthenon, and the host of other marvels of the ancients that we now know only by meagre descriptions!

It is a fact that Italy, both in classical and modern times, has devised and practised the most intelligent and suitable setting for detached sculpture, thanks largely to the mildness of climate and the art interest among its peoples. I shall never forget the impression made on an American acquaintance, who had preceded me to Florence, by the "Loggia dei Loanzi" and its contents. When he met me at the railway station he exclaimed: "Why, they've got figures here that at home we would lock up in a museum, *right on the street!*" And it really is a notable sensation to pass familiarly a dozen times a day this little mediæval portico and see the bronze "Per-

seus" of Cellini, with its companion marbles by Jean de Bologna, Donatello, and other masters, where everyone may touch, and yet unharmed by vandals.

The arrangement alluded to—the placing of statuary under a portico or arcade—was that adopted by the wealthy art lovers of classical times, who used it to adorn their luxurious villas. Most of our knowledge on this point comes from the so-called Villa of Aristides, at Herculaneum, which has been explored by a series of excavations, being now buried deeply under the ashes of Vesuvius. In addition to the usual living rooms was a spacious garden surrounded by a high masonry wall. On the inner face of this wall and a row of columns parallel to it, and distant about ten feet, was carried a roof—thus making an arcade surrounding the open space in the centre, where were placed fountains and large groups. Between the columns were pedestals for busts and small figures, while against the wall under the roof of the arcade other figures and groups found suitable lighting and background. Essentially the same plan prevails in the cemeteries of the large cities of modern Italy. The arcade becomes of rather more substantial construction, the columns being replaced by piers carrying arches; these piers are often wide enough to support tablets. Pilasters balancing the piers are made on the opposite inner face of the main wall, thus forming niches answering to the openings of the arches. Transverse arches are also thrown across under the roof, producing a vaulted or groined ceiling. Underneath, in the masonry of the foundations, are receptacles for the caskets, and the corresponding monuments are placed against the background wall and in the openings under the arches.

The "Campo Santo," or cemetery for Genoa, where the accompanying views were taken, is located on a plateau among the Apennine foothills back of the city, in a suburb called Staglieno, and is one of the show places of the town. There are several courts, which have been added from time to time, opening one into another, and under the arcades are hundreds of sculptured monuments, tablets, figures, and busts, mostly in marble, although bronze and granite are also used. The intensity of the emotions expressed by the sculpture is most noticeable to the Anglo-Saxon visitor. The wife is portrayed at the sepulchre of her husband, holding the child so that it may kiss the father's portrait—every detail of face and figure and costume true to the life. Orphaned children kneel at the tomb

UNDER ONE OF THE ARCADES.

TABLET: PART OF A MURAL MONUMENT.

of their parents; family groups at the bedside of the departed are shown in full or partial relief. These marble figures are counterparts of many who still move about their customary vocations in the nearby city of the living.

Even when the personal motive gives way to the allegorical, nothing less than heavenly visitors in the shape of angels, usually with plumy pinions, find favor. And an occasional extravagance creeps in —like the figure of Father Time, represented as an old man of venerable aspect, who has paused in his flight through the ages to sit an eternal moment on the tomb of the man whose portrait is placed overhead, and incidentally become its chief decoration.

There are a few general suggestions to be made on the practical side, the outcome of some personal experience and of comparison of notes with other workers. First as to the light. An overcast sky is better than bright, clear weather for taking open-air work; indeed, one of the best renderings of a marble statue that I ever saw was made in a slight rain that came on just as the object was reached after a long journey; the exposure was risked as a forlorn hope, but the result was most successful. The bright sun makes such strong contrasts between the high-

SCULPTURED MONUMENT IN ARCH OPENING.

lights and the shadows that it is to be avoided whenever possible. The ideal condition for a successful photograph of an out-door group of statuary is when the sun, at just the right altitude to properly illuminate the subject, is temporarily obscured by a light cloud floating across. Then the shades and the shadows blend softly into the lights without losing their proper relation each to the other. If one can choose his weather, such a combination is less difficult to secure than might be imagined. There are many days, particularly in the summer, when it is possible of realization, if one will only bide his—and Nature's—time.

A full exposure with comparatively small stop and on a slow rather than a quick plate is always desirable, developing for detail rather than for contrast. There are subtle relations of the planes of flesh and drapery in sculpture which must be suggested by the photograph, if it is to seem "round" and modelled instead of a mere silhouette, outline and nothing more. The snap-shot and quick plate give the silhouette but not the roundness, and are therefore to be avoided.

A long-focus lens rather than one of short focus and wide angle should be used whenever possible, even if this involves covering a small plate rather than a large one. This is a point too often overlooked by "professionals," whose ambition it is apparently to make the object as big as possible on a given size of plate. But the

foreshortening thus produced, especially of the pedestal and accessories, is so violent as to make the result seem distorted when wide-angle lenses are employed. And while we are accustomed to confine the term to architectural structures and landscapes, there is, nevertheless, a perspective to the human figure and to its representations, neglect of which is felt, even if not always understood.

A plea needs to be made against the practice of obliterating the background in photographs of sculpture. This gives the same effect as cutting out and mounting on black paper, and suggests the silhouette and flatness instead of the model and roundness. The value, for purposes of study, of many photographs of small sculptures in foreign museums is seriously impaired by this stopping out of the background. One is never certain whether an irregularity in outline is part of the sculptor's conception or due to a slip of brush or knife of the background "artist." Besides, there is a loss of scale if the objects which in reality surround the bust or figure are not included with it for comparison.

Naturally, works in marble and plaster require shorter exposures than bronzes, or the clay models one is sometimes called on to copy, often in the sculptor's studio. These last are the most deceptive of any, and it is a pretty safe rule to give all the time you think they can possibly require —and then give half as much again. Of course, these observations on out-door statuary are applicable to objects of similar character, such as monuments, urns, fountains, and the like; although these, being much less complex in their nature, will not need quite the attention to details that is demanded by sculpture.

PORTRAITS BY W. E. PARTRIDGE,
Brookline, Mass.

## OUR PICTURES.

The practical photographer, whose success depends upon the common-sense and thought put into his work, will enjoy the pictures illustrating this number of the MAGAZINE. They have been chosen for his satisfaction and for the information which they offer. Among them we have examples of the work of well-known and unknown studios, and practical lessons in posing, lighting, arrangement, and treatment of the subject. Heads, half- and three-quarter-, as well as full-length, figures are given; dainty vignettes, plain and costume portraits, and a few special examples illustrating approved methods of photographing statuary. From these the reader will readily grasp what is obviously of most use in his own practice; but, apart from this point of view, the diversity of suggestion offered by the collection as a whole should not be overlooked.

The place of honor is given to the work of a photographer comparatively unknown. Our frontispiece is from a platinotype by Mr. J. W. Ward, of Connellsville, Pa., and is a good reproduction of a straight-

MINIATURE PORTRAIT,
A. C. Johnstone, Hartford, Conn.

forward piece of portraiture. It shows what the lens and plate will do, without retouching or after "faking," when handled by an intelligent worker. Mr. Ward has for some time devoted special care to the problems of lighting and negative making. His work shows the thoroughness with which he has studied his task, and how well he has succeeded. He has secured almost all the qualities most desired in a portrait—detail, softness, likeness, roundness, depth, modelling, textures well defined, values correctly expressed, naturalness, and a pleasing illusion of life. We feel that the subject is seen at its best, and that portraiture of this sort must win the favor of the public.

The picture is a long way removed from the "artistic" portraiture so much exploited in amateur journals. It may lack "painter qualities," but it has good photographic qualities, which are preferable in a photograph. It also lacks the fuzzy indistinctness, the vagueness, the chemical fog and deadly flatness, the confusion of form and details which make folk wonder at some of the fashionable pictures of to-day. But as a portrait, a likeness of a person, the portrayal of a young woman as her friends know her in every-day life, it is a success. It has its faults. The handkerchief is perhaps a little too persistent, and prevents us from taking in the more delicate tones of the face; and the background is a shade too light, contrasting perhaps too boldly with the dark masses outlined against it. We would have liked to have had a little more space about the figure, and three-eighths of an inch more of the bust would have given a better proportion. But these are minor faults. As a bit of photographic portraiture it is decidedly good and praiseworthy.

The oval vignette portrait of a child, by Mr. A. C. Johnstone, of Hartford, represents fairly successfully a specialty which has proved profitable. The reproduction is the same size as the original, but lacks the soft depth and feeling which charm us in the platinotype. There is a little careful handwork on the ground and bust, by which the print is given a certain amount of finish. Mr. Johnstone had a fine collection of similar pictures at the New England Convention, and they were much admired for their delicacy and refinement. This was the only one which would bear the loss of values inevitable in half-tone

reproduction. The gray margin about the vignette represents an embossed frame or design, and the mount, 5¼ x 7½ inches, is cream tinted with a grained surface.

The little circular portraits of children, as well as the costume portrait group shown above Mr. W. E. Partridge's name, were chosen during a visit to the Partridge studio at Brookline, a suburb of Boston. They indicate the quality of work which has brought success to Mr. Partridge in the three or four studios which he has in and around Boston. The Brookline Studio is a delightful place, built in the style of a country cottage, all the workrooms being upon the ground floor. The large hall forms a most attractive reception and display room. Beyond are restful retiring rooms, each devoted to the exhibition of a special class of pictures, and leading directly into the spacious studio. The place is under the direction of Mr. A. T. Barraud, who comes from a family long prominent in English photography, a clever workman under the skylight, and one of the most delightful of men to meet. That the children appreciate his qualities is seen in his pictures of them, in which the little folk willingly display their winsome ways and simple graces.

In the portraits by Messrs. Pach Bros., of New York, the photographer may gain valuable suggestions in posing and arrangement. The two pictures of the child with the book are portraits of the daughter of Mr. Alexander L. Pach, formerly of Easton, Pa., but now an active helper in the great establishment at 935 Broadway.

Mr. William Gill's two costume pictures and the two professional portraits by Schloss, of New York, take us into more complex branches of work, and are successful examples of photography for publication. Although they have lost some of their finer qualities in reproduction, they are still worthy of careful study in their make-up and execution.

The "Novel Effect," by Mr. Evan D. Evans, of Ithaca, is reproduced to show a style which Mr. Evans has introduced with considerable success. It has the charm of novelty, and, when carefully carried through with suitable subjects, effectively simulates the wash drawing. Since reproducing the example here given we have received others exhibiting still more attractively the effects sought after. One of these we will show in a later number of the MAGAZINE.

The portrait by Mr. Hollinger, taken from *Mosaics*, 1901, needs no comment. It is one of the best portraits of a man we have yet seen, and should be given a place in every photographer's studio as an example of "what to do" which will not easily be improved upon.

TWO POSES BY W. E. PARTRIDGE,
Brookline Studio.

## PHOTOGRAPHS ON OPAL.

EVERY photographer, says a writer in *Photographic Chat*, will have observed the marked difference in the effect of a picture which is produced by the choice of a suitable basis. However beautiful the character of photographs which are produced upon one of the many grades of rough surface papers which are commonly used by makers of bromide papers, there is quite a unique effect observable when the photograph is imposed upon porcelain or opal glass.

For some reason which is not quite apparent, but is due probably to either the higher cost of the opal as compared with paper, or the supposed greater difficulty of making photographs upon opal, this beautiful process has hardly maintained its hold upon the public, and it is to meet the latter supposition, viz., the greater difficulty of production, that this particular page is written.

As a matter of fact, the making of a photograph upon opal is quite as easy as it is upon paper; and if the necessary variations are carefully borne in mind the amateur will have no difficulties before him which he cannot easily surmount. In the first place, as regards the choice of a process there will be little doubt that the bromide process offers the most facile method of procedure, and although the carbon process offers certain advantages, yet we do not hesitate to advise our readers to "plump" for the first-named process, at any rate for their earlier attempts.

Opal glass coated with a bromide emulsion can be obtained from Seed or Carbutt, we believe, and our first advice to the would-be opal photographer is to purchase a packet of 4x5 bromide opals and to read carefully the instructions. It must not be forgotten that the plates are nearly as sensitive to daylight as are ordinary photographic dry plates, so that all proper precautions as to opening the packet in the non-actinic light of the dark-room must be observed.

Quite the most easy way of making the first essay will be to make a "contact" picture—that is to say, to make an exposure to a negative just in the same way as one would if he were about to made a lantern slide by contact. It is not necessary that the negative selected for the purpose should be of the same size as the opal plate. A portion of a larger negative which contains a "pretty bit" may be chosen, and often may be chosen with advantage to the pictorial result.

The negative should be placed in a printing frame, and its surface—the surface of the negative as intended—dusted with a camel's-hair brush, so as to remove any specks of dust or grit. This is very important, as the two surfaces which are to be brought together—viz., the surface of the negative and the surface of the opal—being rigid, the presence of a small speck of dust or grit will not only make the usual white "spot" on the resulting picture, but will produce other and more serious disaster.

Dust will prevent the two surfaces coming into close contact, and by this means produce a "fuzziness," or want of sharpness, which will not be pleasing in this particular connection; and it will also cause a risk of breaking the negative when the pressure of the springs upon the back of the printing frame is applied, and thus cause a loss which the owner will be sure to regret.

Having taken this necessary precaution, and also applied the camel's-hair dusting brush to the sensitive surface of the opal, an exposure to a paraffin lamp or gas jet may be made in a similar manner to that which is customary in making lantern slides. It will be found that the sensitiveness of the bromide opals of any particular manufacturer is generally identical with that of the slower brand of lantern plates, and in the absence of test pieces of bromide paper in the packets of opals the test indicated will usually be found to be sufficiently reliable to enable the tyro to get a correct exposure.

If it is thought desirable a vignetted edge can be given to the "opalotype" by shading the negative during the exposure with a cut out mask, which can be made out of cardboard or purchased from the 'ealer.

With this outline of the process completed we will proceed to deal with the matter of the development. There is little doubt that to produce the delicate gradations so essential in a good opal picture there is no developer more suitable than amidol. This should be prepared freshly for the occasion, and may consist of a 5 per cent. solution of sulphite of soda, containing two grains of dry amidol to each fluidounce of solution and one-fourth of a grain of bromide of potassium.

This developer will produce an image of excellent color and will also have no tendency to develop a foggy image, which is quite the most undesirable fault in an opal picture. Development being complete, fixation follows in the usual course, in a clean 10 per cent. hypo bath, which should be freshly made for this use.

## NEWS FROM THE CRAFT.

*Theo. Marceau*, of San Francisco and elsewhere, has opened a palatial studio on Fifth Avenue, New York, and has startled the photographic community by announcing "cabinet portraits at $6 per dozen." The studio is a comparatively new one, located near Twenty-ninth Street, in the fashionable shopping district, and was equipped about two years ago by Mr. D. H. Anderson. As it appeared then the studio was described and illustrated in this MAGAZINE for May, 1899.

Marceau has remodelled the place to meet his requirements and improved the entrance by converting a store into a reception hall and display vestibule. This hall, as a matter of course, represents the rent of a store, which in itself is no small figure in that part of the avenue. The outside display consists entirely of carbon prints of various sizes, on paper and porcelain, and is marked by considerable taste in the selection of attractive subjects, frames, and arrangement. It is worth noting that, confronted with the importance of showing the quality of his work to the best advantage, Marceau relied entirely on the carbon process as giving the best results from his negatives. The results abundantly justify his belief.

*A. B. Stebbins*, of Canisteo, N. Y., has recently equipped a fine establishment in a new business block on West Main Street. The new block is built on modern business building lines, and is perhaps the most imposing structure of the town.

The Stebbins studio occupies the whole of the top floor, with an imposing reception-room on the ground floor and printing-rooms on the second floor. The operating-room is 15 by 35 feet, and is equipped for work up to 11x14. A single slant light takes the place of the older form, and the furnishings of the place are of antique oak with olive-green draperies. A large window seat in the studio gives the visitor interesting views of the life of the street, and many conveniences have been added to make the place attractive to its patrons.

Mr. Stebbins began business in Canisteo in 1879, and his growth has resulted largely from his assiduous reading of the craft journals and the putting into practice what he has learned therefrom.

*A Rock Island*, Ill., subscriber sends an interesting description of the new studio recently opened by photographer Blakslee, of that town. We had the pleasure of giving Mr. Blakslee a few hints in the construction of the studio, and are pleased to see how well he has completed his undertaking.

The studio is an attractive two-storied building, Flemish in architectural style, and the façade is constructed or faced with pressed brick and tile. The wide central entrance is flanked on either side by a large window for display purposes, and the single slant skylight in the mansard roof has a dormer window on each side.

The wide vestibule leads into the commodious reception-room, from which all rooms on the ground floor radiate. With the exception of the vestibule and office, which are done in red tints, green effects prevail, the wall coverings being tapestry, burlap and crêpe. The east front room is the finishing room, while the west front room is the office. The printing- and

toning-room occupy the south half of the first floor, while the art room opens from the reception-room by an arch. The studio proper on the second floor is reached by a stairway from the reception-room, and gives a most favorable impression by its size and elegance. It is furnished with all the accessories needed for first-class work. The dressing-room and dark-room open directly from the studio. The former is a dainty apartment, whose furnishings are complete to the most minute detail. The furnishings of the reception-room are in mahogany, while those of the other rooms are Flemish and golden oak. The building is lighted throughout by gas and electricity. The studio is equipped for all kinds of photographic work, and will make a specialty of platinum and carbon portraiture. Mr. Blakslee is assisted by Mr. H. J. Balchen, who during the past seven years has been employed in the famous studio of Mr. S. L. Stein, of Milwaukee.

The studio was opened with an exhibition of portraiture by some of the best American studios, and proved a big attraction to the people of Rock Island, who availed themselves in great numbers of the opportunity to see the fine display. Among the examples shown were portraits and *genres* by Moore & Stephenson, of Atlanta; Guerin and Strauss, of St. Louis; Steffens, of Chicago; Falk, of New York; Hayes, of Detroit; Morrison and Mrs. Bartlett, of Chicago; Kough, of Greensburg, Pa., and the American Aristotype Company. A special collection of miniatures by Mrs. Blakslee won particular admiration, and demonstrated that the studio is well fitted for the best class of work.

Mr. Blakslee deserves great praise for his enterprise, and success must follow business methods so intelligently applied. We wish him all prosperity in the work.

*A clever* bit of advertising has recently been put out by the Strauss Studio of St. Louis. This consists of eight pieces of artistic "cover" paper, ranging by steps from 5½x7½ inches to 4x1⅞ inches, fastened together so that a "catch line" is seen on each piece. The first and smallest card bears the legend, "Greetings from the Strauss Studio;" the other cards bear persuasive advertisements well calculated to draw business from the out-of-town people to whom the novelty is sent. One of the cards is a private postcard, with directions bearing on the desirability of an appointment for a sitting or a visit to look over the pictures and rooms of the studio.

The thing is well conceived and carried out. We are confident that such advertising forms a good investment.

*According* to an announcement in *The Philistine*, Pirie MacDonald has opened a studio in the Washington Life Building, New York, and will hereafter devote himself to "Portraits of *men* only." MacDonald is nothing if not original, and his originalities have the stamp of earnestness and success upon them. We will watch the outcome of this latest venture with much interest.

*Mr. Alex. L. Pach*, who has charge of the printing and finishing departments of the Pach Studio, New York, and probably oversees the finishing of more prints in a single month than many studios turn out in a year, writes as follows concerning a trimmer or cutting-wheel used in trimming prints to circular, oval, or odd shapes:

"This is the statement of facts, and it is made so you can ventilate the subject and spur some one on to invent a cutting-wheel that will not cause the troubles mentioned.

"For some time past our girls have been complaining of the large number of metallic spots, nearly all of which were in prints that had been cut oval and round. We carefully traced the trouble, and found it due to minute particles of brass and copper that came from the forms when the prints were cut. We have the two styles of wheel on the market, and have had what we believe to be improvements, made on the Nicholson wheel, introduced by Hyatt, but all to no purpose so far as getting to a better state of affairs. Now it takes a set of about sixty of these forms, costing in some cases as high as $1.50 each, and of course we can't throw them away after using them a few days. Perhaps, if you ventilate this matter, the necessity of improved methods of cutting these popular shapes, either in the form or the wheel, will prove the immediate ma-

ternal ancestor of an invention to obviate the troubles mentioned.

"At this very late day will you permit me to thank you very heartily for a very fine issue of *Mosaics*, artistically the nicest I have ever seen?"

*Mr. Alfred Harmsworth*, of the London *Daily Mail*, now visiting America, says that the half-tone illustrations printed in the New York *Tribune* are "quite extraordinary in their excellence and quality." This is a well-deserved tribute to our old friend Mr. Stephen H. Horgan, who has charge of the art and engraving departments of the *Tribune*, and who has probably done more than any other man for the popular use of half-tone illustration by our leading newspapers. Well done, friend Horgan.

*Mr. Louis Prang*, of Boston, makes known on another page the fact that he has several Levy screens for disposal at reasonable prices. There is an opportunity here to obtain a Levy photo-engraving screen at some reduction from list rates. Doubtless some of our readers will be glad to embrace the chance of obtaining one of these standard screens.

## THE DETROIT CONVENTION: P. A. OF A.

*To the Fraternity:* In presenting the minutes of the Executive Committee of the Photographers' Association of America, I wish I possessed the power to write a chorus. Not that I feel that it needs an explanation or excuse, but that I might add a trifle to its attractiveness.

The greatest good that can come to the Association is from the display of pictures—good pictures. How to get them—that's the question. Heretofore the prizes were supposed to be the all-inspiring incentive, and it was thought that, by offering a medal or prize of more or less value, the tendency would be to stimulate the production of good things. I am not ready to assert that it has not been productive of great good, but that it has always gathered the most of the best I very much doubt. The photographic profession today consists, for the most part, of shrewd business men—men of high artistic sense—men who, for the chance of winning a medal which might be a pleasurable compliment to their skill, would not run the risk of a freak of fortune throwing it into the hands of a purely commercial competitor, who might seek to ride into popularity on the prize so awarded.

That each exhibitor will send his best I think goes without question. The composition of the profession is a guarantee that all are making the best that they can produce, and all are equally anxious to improve. The promises already given by some of the leaders bid fair to make this one of the best exhibitions that has ever been shown. The Executive Committee have many new and desirable things to attract you toward Detroit and the Educational Convention in August. Can you afford to miss it? We think not.

E. B. CORE,
President P. A. of A.

### EXECUTIVE MEETING OF THE P. A. OF A.

The annual meeting of the Executive Board of the Photographers' Association of America was held in New York January 15, 1901. There were present E. B. Core, President; D. D. Spellman, First Vice-President; H. S. Klein, Second Vice-President; J. George Nussbaumer, Secretary; F. R. Barrows, Treasurer; C. M. Hayes, Past-President.

The meeting was called to order for an informal discussion on plans for the coming convention, and later adjourned until the following day.

At the adjourned meeting President Core appointed D. D. Spellman, H. S. Klein, and himself an Auditing Committee to pass on the report and books of the Secretary and Treasurer. The same were found correct.

*Treasurer's Report.*

| | |
|---|---|
| Cash on hand January 1, 1900 | $1201 43 |
| Received in membership and dues | 2773 00 |
| Space and desks | 1602 50 |
| Refund from Geo. B. Sperry | 90 |
| Total | $5577 83 |

| | |
|---|---|
| Total cash for 1900 . . | $5577 83 |
| Paid in vouchers from 173 to 230, inclusive . . . | 2471 05 |
| Balance, cash on hand . . | $3106 78 |
| Cash on hand, January 1, 1901 . | $3106 78 |

F. R. BARROWS,
Treasurer.

*Secretary's Report.*

| | |
|---|---|
| Cash on hand, January 1, 1900 . | $1201 43 |
| Received for space and desks . | 1602 50 |
| Dues . . . . . | 34 00 |
| Bills receivable . . . | 107 50 |
| Paid Treasurer . . . | 1636 50 |

J. GEORGE NUSSBAUMER,
Secretary.

The subjoined motions were then put and carried:

Moved and seconded that the Photographers' Association of America meet in convention in Detroit, Mich., August 6th to 9th, inclusive. Carried.

Moved and seconded that the awarding of prizes in competition shall be eliminated from our coming convention. Carried.

Moved and seconded that this convention shall be called "The Educational Convention." Carried.

Moved and seconded that the President appoint a committee, composed of one photographer and one artist, to criticise the individual exhibits, on request of the exhibitor. The same to be given in writing and to the exhibitor only. Carried.

The rules governing the exhibition of 1901 are as follows:

I. Exhibits may be framed or unframed, at the discretion of the exhibitor.

II. The Association will not be responsible for any loss or damage to pictures in its charge, but will use all reasonable care to prevent such occurrences.

III. Applications for space in the Art Department shall be made to D. D. Spellman, First Vice-President, Detroit, Mich.

IV. All pictures submitted for exhibition must be addressed to D. D. Spellman, First Vice-President Photographers' Association of America, Light Guard Armory, Detroit, Mich., forwarded at owners' risk, and delivered not later than August 1st, charges prepaid.

V. Exhibits for the Manufacturers' and Dealers' Department to be shipped to J. George Nussbaumer, Secretary Photographers' Association of America, Light Guard Armory, Detroit, Mich., charges prepaid, and placed in position by August 1st.

VI. Have your box-covers screwed instead of nailed. Your home address must be marked on the under side of cover for return of pictures. Association will not be responsible for packages not marked.

VII. All boxes and packages will be accepted at any time previous to August 1st, so that photographers need not feel any uncertainty about the safety of their goods. No exhibits will be allowed to be removed from the hall until the close of the convention.

VIII. No manufacturer or dealer, or their representative, shall do business on the floor of the hall unless he or they rent floor space or desk room, and the manufacturer or dealer shall pay two dollars for each employé or representative attending the convention.

IX. Employés, to gain admission to the convention at the employé rate (two dollars) must furnish certificate from employer or be indorsed by two active members of the Association.

Moved and seconded that the list of Honorary Vice-Presidents be dropped. Carried.

Moved and seconded that the President appoint an advertising committee to advertise the Educational Convention of 1901. Carried.

The President appointed C. M. Hayes, F. R. Barrows, and J. George Nussbaumer on said committee.

The following committees were appointed:

*Committee on Railroads.*—D. D. Spellman, J. George Nussbaumer, and F. R. Barrows.

*Committee on Printing.*—J. George Nussbaumer and E. B. Core.

*Committee on Button.*—E. B. Core, H. S. Klein, and F. R. Barrows.

*Committee on Hotels.*—C. M. Hayes and D. D. Spellman.

Respectfully submitted,
J. GEORGE NUSSBAUMER,
Secretary.

# THE PROFESSIONAL AND THE MOUNTS HE USES.

BY HUBERT MC BEAN JOHNSTON.

P. T. BARNUM, the great showman, used to say that people liked to be humbugged, and he was just about right. Pay a visit to half a dozen photographers (six is enough, for they are all about alike) and, by observation and asking questions, find out what his photographs sell for a dozen and how he fixes his charges. Of course, you will invariably find that, in the first place, his prices are graded differently for solio, aristo-platino, platinotypes, carbons, etc., and vary in each according to size and quantity; but, after that, and in the ordinary work turned out, the real great factor that determines the dollars and cents he shall receive is the card that the picture is mounted upon. The card, therefore, holds practically a very important position in the business of the photographer, and surely ought to be given more consideration than is usually the case, for, my photographic friends, you must admit that the cards that are commonly used to mount on are awfully incongruous as a rule. The great majority of photographers appear to be fairly well up in the technical side of their work, and mostly know something about posing, lighting, developing, toning, and all those things; but when it comes down to mounting a photograph—oh, but the work is execrable. And when you place before them a print and ask for a criticism on it, they will usually fly off on some long rigmarole about it being over-exposed or under-exposed, or the lighting dividing the face too evenly into halves, or something else, but never mention the mount; no, not even if it is red and gold, as I have seen some. But say, who are these photographers all catering to, anyhow? To one another? No, you bet they're not. They're everyone of them doing their level best to please that great fickle body known as the people, and yet they all seem to forget that most people judge the quality of a photograph by the card it is on.

Take my word for it, if a good, live, up-to-date photographer who is well able to turn out flattering likenesses were to open up a business somewhere and use poor cards he would never make a success of it; but if an ignorant pork butcher opened up a rival studio next door and made a specialty of putting out his prints on the swellest kind of cards he would quickly drive the first man to failure. Now I don't mean that you are to use nothing but good cards, nor do I mean that you are to put in a heavy stock including half a hundred different styles; not at all, for, in the first place, some people can't afford to pay for the higher priced work, and, in the second place, photographers (except in very large places) would not find it would pay them to stock up to any large extent. But if you expend a little common sense as well as a few cart wheels in picking out your stock you will be surprised at the ground you can make a comparatively small stock cover. It is, of course, the business of the stock-house traveller to sell his goods just as much as it is your business to buy only what you want, and if you don't want to find yourself overloaded with a big bunch of worthless trash you've got to watch yourself and use your own judgment despite anything he may tell you. In his grip, it is altogether likely, he will have cards with photographs mounted on them that are the productions of well-known studios. He will draw your attention to this fact, usually with the explanation, "The very latest thing." Don't let yourself be drawn in by that, but first stop and consider if it is a card that will harmonize well with the class of work you are putting on the market, and if you can put it on at a price that will agree with the pocket-books of the class of people you are catering to. Every photographer's trade has its own individuality, and no one but himself is able to judge accurately of its little eccentricities and peculiarities. Now I don't mean by this that you must buy anything but "the very latest thing." But there are so many different styles put on the market each month that the wide-awake photographer will never find himself handicapped in this direction. Should his stock-house not have just what he is looking for, either they will usually

make it for him at about the same price, or else a perusal of the advertising columns of the photographic journals will bring to his attention something that will fill the bill. Another thing: Don't let this running after "the very latest thing" lead you astray. Just reason for yourself for a minute and you will see that the latest thing in New York and the latest thing in San Francisco may be widely different—the whole width of the continent—and that in the cities lying between these two points there are probably twenty latest things in the designs of panels, ovals, panel-ovals, etc., in various tints and sizes. You just go ahead and pick out a variety that you think is going to "go" well in your town, no matter whether Falk and Taber used the same thing two years ago or not. It's still the latest with you, you know.

Why on earth do some photographers use the heavily flowered and fancy embossed mounts, and what enterprising (?) stock-house is it that puts them out? Some of them are enough to drive anyone possessing the artistic temperament, even so slightly, to the verge of distraction, and to cause him to feel like saying things—for instance, —! —!! —!!! White mounts with big, glaring violets stamped round the centre in fancy wreaths may please some people, but those people have never had their tastes educated to anything higher. It all lies with you, professional, what kind of mount we shall be using two years hence. If you go on keeping such horrible nightmares on your show-room walls and sample-table, we are going to go right on using them; but if you will show them only when they are insisted upon, and at other times endeavor to push something more artistic, you are very quickly going to raise the standard of the cards used, provided, of course, a united effort is made. Faugh! the ugly things! I shudder even to think of some of them. Really, at the next convention a resolution against such mounts ought to be passed and the stock-houses and manufacturers be informed of it. And while we're on this subject of ugly card-mounts let me ask how many of you put your names on the front of the card? I'll venture to say 90 per cent. Yes, and most of you do it in big silver or gold letters, too, so that in the case of a small card particularly it is a positive blotch as far as artistic effect goes. You never think of having a smaller die made for a smaller card, do you? Well, I might just inquire, who gave you permission to put your names there? Doesn't the person who buys the pictures own them? I think so. Oh, I know it's all very true one seldom hears a kick made about it, but just stop and think a minute how that same man would object if his tailor insisted on stamping an advertisement on the front of every suit he turned out. I dunno, but I think he would find another tailor pretty quick. Yes, and I'll admit that if you are a Sarony or a Dupont, and your name is of international fame, it may be permissible—nay, people may even want it; but most of you are not, and, what's more, never will be. Now, why under the sun can't you have your name printed just as well on the back of the mount, as photographers used to do fifteen or twenty years ago? Or if you are so egotistical as to insist upon its being on the face of the card, then drop all this gold and silver plating and let us have as small and plain an impression as possible. I invariably find it is the photographer that has the least cause to be proud of his work that puts his name on in the biggest letters, with the coat of arms of his State or equally pointless insignia, and that the photographer who *is* able to turn out something decent is willing to let his productions speak for themselves; and that's the right way for a photographer to advertise, anyhow.

As regards the style and tint of the mount we are using, I think we might learn a lesson from the better class of amateurs. We are a trifle too dogmatic and given to pronouncing our opinions on subjects to them without even acknowledging that they can teach us anything. The fact of our prints running in regular sizes, such as cabinet, etc., has given the mount manufacturer his tip, and he puts before us selections that are guaranteed to fit—even if they don't do anything else. With the green amateur it's just the same, but as he advances and goes on studying and reading his photographic magazines, he takes a step forward and cuts up his own cardboard of the color and size he wants. You say, "The people choose the color of mount

they want. We can't tell them what to take." Yes, the people choose, I know, but what do they know about it? and provided your work is good, don't they usually give you credit for knowing what is all right and what is not? If you tell a man that, with all due respect to his opinion, something else is going to look better, he's going to take your advice—because you are in the business and he thinks you know. Just recollect how it was between you and the hatter the day you went out to buy the hat you are wearing now. When you are taking an order from the sitter find out what kind of paper he wants and what tone the print is going to be, and whether it is to be from a harsh or soft negative, and anything else you need to know, and then trot out your selection of mounts for such pictures, showing him first the one you want him to take. You know it has been said that first impressions are usually the best, and you'll find that in this particular case it is especially so. Then, if he doesn't like it and won't take it, show him the one after it that comes the nearest to perfection. Don't get huffy and let him take any old thing. That's not the way to keep up the standard of the work you are turning out.

Now just a few words more on the prices you are getting, and then I'm done. A few days ago I dropped in on a photographer in New York, whom I knew very well, and found him showing a lady two samples on the same kind of cards, with the exception that one was brown and the other was green. He asked a dollar a dozen more for the green ones, much to my astonishment, and got it. After the lady went out he explained to me that the green ones "took" best and were going about twice as fast as the brown, so he thought he might just as well have the extra dollar as not. In plain English, he was bluffing the people that they were getting a better thing and so making a little more out of it. To my mind, he was not making enough extra out of it to compensate him for the fuss that was kicked up next day by a live amateur who knew a thing or two about the price of mounts. You cannot fool the public always, you know. But, on the other hand, I think it is perfectly legitimate to charge two dollars a dozen more for a mount that costs you an extra quarter. You've got to have some way like this to grade your work, for if you are doing your best to keep up the reputation for turning out none but perfect pictures, you are going to spend just as much time on a two-dollar negative and its prints as you would on a four or six-dollar customer; and don't be afraid to stick on the prices either. The same man I was just referring to had in stock a lot of mounts that he used a little over three years ago. He did not know what they were good for, and I laughingly said to put them down stairs at $6 a dozen, and picking up one of a similar type with a print on it, marked that price on the back and threw it among his samples. He laughed and we forgot all about the matter. What was his astonishment next day to find the lady in the reception-room coming up with a query as to whether he had these mounts in stock, and holding forth an order for a half dozen. Well, to cut it short, he got rid of every one of them in five weeks.

But why say any more on the mount question? What I have tried to impress upon you is that it is by the mount that a great many people judge your work, and it is by the mount that to a very large extent your prices are controlled. Surely, then, with two such excellent reasons as these for calling attention to it, it is worthy of a little more thought and task in buying and and a little more care in selling than it usually receives at the hands of the average professional photographer.

---

*The English photographer* of the low-priced class has a chronic wail against the free-portrait swindler; for years a man named Tanquerey has swindled people, and though forever "exposed," he still continues, untroubled alike by his victims and by the "arm of the law."

*The new Zeiss Unar lens*, working at $f/4.5$, and including an angle of 65°, will put a new power in the hands of the photographer, for with such an angle he will be able to take groups in the studio at a very short range.

# NEW CENTURY PHOTOGRAPHY.*

BY THOMAS BEDDING.

In the last three weeks the newspapers have printed numerous articles of a retrospective character. The lines of progress in the century which closed a fortnight ago have been traced for us by many skilful pens, and I have no doubt that most of us have read so much history this new year that we have become somewhat weary of it. Let us then, to-night, by way of change, look forward along one of those open grooves of time which photography is manifestly destined to traverse. The loose threads of experimental work which must be visible to the eyes of the contemplative photographer should convince him that this modern handmaid of the sciences is still far from the maturity of her beauty and utility.

### THE MYSTERY OF THE LATENT IMAGE.

Our knowledge of the action of light on sensitive silver compounds—the pivot, so to speak, upon which the whole of modern photography turns—is still vague. Precisely what chemical change takes place when your lens projects an image of a view or object upon a sensitized plate or film has not yet been agreed by the investigators who have studied the matter. Two principal theories have been advanced. One, that a sub-salt of silver is formed; the other, that an oxy-salt results from the reducing action of light; but so far neither can be said to satisfactorily establish the identity of that most elusive mystery of photography, the latent image. This branch of inquiry was last dealt with in this country by Professor Raphael Meldola, who, I believe, favored the sub-salt theory. But since then much has been recorded which by no means simplifies the mystery. You do not require the action of solar or other rays to produce a developable impression on the sensitive salt of silver; simple mechanical pressure will suffice. Again, Dr. W. J. Russell has shown on many occasions that the exhalations from organic bodies, such as wood, leather, essential oils, and so forth affect the silver salts in exactly the same way as light; while even inorganic bodies, such as sheets of metal, emit what we may for convenience' sake term influences which also exercise light action or its equivalence upon sensitive plates and films. More remarkable still are the discoveries of Mons. Becquerel, M. and Madame Curie, and others of an entirely new set of phenomena grouped under the explanatory heading of radio-activity. Compounds of uranium, barium, polonium have been ascertained to store up and retain a form of energy which, when received upon the sensitive plate, affects it in exactly the same way as solar light, viz., by reduction. This hasty glance at a most interesting series of phenomena, quite as wonderful in their way as the penetrative influences of the Röntgen rays, which have only an indirect bearing on photography, may serve to remind us how wide is the field opened out to us by a consideration of photographic action and the variety of ways in which it is set up. The ultimate outcome of all these wonderful manifestations of photographic energy no man can tell, but that they are destined to have great influence upon the photography of the future is at any rate probable, for modern science moves in the direction of utilizing all forms of energy, and it may not be wholly wide of the mark to conjecture that photography by what is known as invisible light will be practised in some form or other during the century.

### PIGMENTARY COLOR PHOTOGRAPHY.

Your President, whose interest in color photography is well known, has from time to time brought before you the color-photography methods of Mr. Ives, Prof. Joly, Prof. Wood, and Mons. Lippmann. The first three, as you are aware, are based upon the principles of trichromatics; the fourth is an interference process. All of them have passed out of the experimental stage, but it is doubtful if any considerable further developments await them. It must be said

* An Address delivered before the Oxford Camera Club.

that, beautiful and interesting as these pictures undoubtedly are, they do not realize the general or, at any rate, the popular conception of what a photograph in natural colors should be. To do this a pigmentary process is obviously called for, inasmuch as the paper print, and not the transparency on glass, is the outstanding aspiration of the public at large. Experiments with this object have been numerous, and, to quote an expression I have already used, there are several loose threads visible which might be worth attacking by some new-century experimentalist in color photography. I will particularly allude to the uncompleted experiments of Mr. Matthew Carey Lea, the most recent investigator of note, who did much good work in pre-gelatine days, and who published, some fourteen years ago, the results of a number of experiments which certainly raised hopes at the time that a good start in pigmentary color photography had been made. He experimented with the silver haloids and produced by purely chemical means of the simplest nature a red silver chloride which exhibited a range of color "from white to black through the following gradations: White, pale flesh color, pale pink, rose color, copper color, red-purple, dark chocolate, black." Carey Lea, whose experiments with the photo-chloride of silver, as he termed it, were very exhaustive, concluded his memoir with the words: "I am persuaded that in the reactions which have been described lies the future of heliochromy, and that in some form or other this beautiful red chloride is destined to lead eventually to the reproduction of natural colors." Probably, of all those who have experimented with the silver salts, Carey Lea in his work came nearest to a fundamental attempt to prove that a wide range of color effects could be obtained from a pure silver haloid—a necessary condition of a pigmentary method according to the practice of modern photography. Thus, from the days of Sir John Herschel in 1839 down to comparatively recent times, a vast amount of experimental work in pigmentary color photography has been recorded, and the new-century photographer who attacks the color problem by the direct as opposed to the indirect method of trichromatics will find awaiting him a wonderful and fascinating mass of data upon which to draw. The marvel is that this branch of work has been so studiously neglected, seeing that the desire for a solution of the problem is so wide-spread.

### THE LENSES OF THE FUTURE.

The advances in lens construction which have been made in the last thirteen years, mainly due to the production of a number of glasses having qualities of refraction and dispersion that were not possessed by the flints and crowns of which photographic lenses, before 1888, were composed, have been so great that the photographer may be well excused if he believes that the opticians have reached finality in this important matter. In the typical anastigmat of the day you have an intensity of working aperture covering and defining powers and freedom from aberrations such as the lens-makers of twenty years ago would not have thought practicable. At that time it must have seemed futile to insist upon the theoretical requirements involved in the construction of a lens in which, to select the two aberrations most familiar to all intelligent photographers, astigmatism and curvature of the field were either destroyed or minimized, for the necessary glasses could not then be had. But in these times a more favorable state of things exists. The formulæ of the mathematicians cause no dismay to the glass-maker, whose catalogue includes scores of varieties, admitting of combinations which in the completed objective result in the transmission to the sensitive surface of an image practically free from optical error. The influences of these advances have perhaps shown themselves more in photographic work of a scientific character than in that of those with whom photography is only a trade or a hobby. It is to the former class that any fresh advances will probably make the strongest appeal. One respect in which modern lenses are more or less susceptible of improvement is that of correction for color. The experimentalists in trichromatic photography, for example, would welcome lenses from which the secondary and tertiary spectre had been removed, and what it is convenient to style the con-

dition of apochromatism in contradistinction to achromatism was secured. The perfect correction of a lens for all parts of the spectrum is, however, a matter in which the average photographer will naturally feel small interest. Tell him that the new century will place in his hands a photographic lens as perfect as mathematical and mechanical science can make it, at a very considerably lower price than he at present pays for it, and he will no doubt be glad at heart. This is, of course, a natural development of the optical industry. So great are the improvements constantly taking place in mechanical science that before long we may expect that even in the production of such a delicate instrument of precision as a well-corrected photographic lens hand work, in the chiefest conditions, will be dispensed with, and the inevitable fall in prices will follow the adoption of automatic machinery. There are also grounds for believing that the very forms of the lenses using for taking photographs will be changed. We are so accustomed to the curved surfaces of lenses that it would be a novelty and a surprise to have these surfaces quite flattened. More important still, photographs during this century may actually not require the agency of a lens for the formation of the camera image. Dr. Emerson, whose name as the author of *Naturalistic Photography* will be familiar to you, and who is deeply interested in many branches of progressive science—a fact which may be of interest to those who look upon him simply as an exponent of pictorial photography—tells me that he has in contemplation a system whereby photographs may be taken without the use of a lens, and that this does not mean the employment of a pin-hole, the simplest expression of an image-forming system. Reflective, in lieu of refractive, agency may occur as a possible explanation of what at present is a point of some perplexity; but this is mere guesswork. Enough that new-century photography without the use of lenses has entered the field of speculation; its realization will be another thing.

### A JAPANESE SCHOOL OF PHOTOGRAPHY.

We have recently heard much of the so-called new American school of photography and its probable influences on British work. Doubt has been thrown on the validity of the claims of our American friends to have originated anything new in pictorial photography. In the United States the expressive word "freak" is widely applied to printed images which, whatever artistic qualities they may be imagined by their producers to possess, so carefully conceal their method of origin as to engender disbelief that photography, as we commonly understand it, had anything to do with the preparation of the results. In this country it is far too soon to gauge the effects which these clever efforts to mask photography in aiming at results expressive of the personal question in pictorial work may have upon native ideas. As in all movements of this kind, a very long war of words remains to be fought before the work of the American school—a school without a system of teaching, it may be noted—has exerted its full effects and either becomes assimilated by British workers or consigned to the limbo of useless experiments. But it may, I think, be taken as axiomatic that that much-dreaded person, "the man in the street," before whose withering frown even cabinet ministers, military commanders, great actors, popular authors, and other persons who live by the exercise of the creative instinct have been known to quail, will not tolerate photographs which are deficient in likeness, versimilitude, and recognizability. Whatever place among methods of graphic expression pictorial photography is finally destined to reach, it will probably not be by confusing the popular intelligence and provoking the ridicule of those who are in a position to put before us personal manifestations of art feeling independent of the trammelling influences of optics, mechanics, and applied chemistry. But from America I will ask you to follow me, in imagination, to a country which seems destined to wield no inconsiderable influence on European civilization in the near future. I mean Japan. How soon will it be, I wonder, before we shall be discussing in this country an exhibition of photographs by the new Japanese school? Within my recollection Japan wholly relied upon Europe for her photographic supplies, but this is a state of things in course of rapid change. Japan to-day is busily engaged

in making her own materials for photography. In a few years' time she will be independent of foreign markets. But more than this: There are distinct signs of the growth of a native school of pictorial photography. In this matter what I will term the innate artistry of the people asserts itself. I have seen portraits and landscapes, delicately colored by hand as well as in monochrome, which have a distinct charm and individuality difficult to express in words. In composition they are simple and direct, and each bit of work, whatever its nature, is characterized by the refinement and taste one associates with the artistic productions of the land of Hokusai. I think we may safely anticipate that Japanese pictorial photography will unmistakably reveal itself to us early in the century, although it is perhaps more certain that European photographic science and manufacturers will sooner feel the direct influences of the England of the East. A friend of mine has suggested to me that in the important detail of camera construction we shall not reach the acme of portability and lightness until the Japanese workman has shown what he can do with the slender materials he knows so well how to fashion and handle. I should not like to close this reference without mention of the fact that a British photographer, the late Mr. W. K. Burton, who lived in Japan for many years, was responsible for the dissemination of a great amount of photographic knowledge there which is now fructifying. Nothing would cause me so little surprise as to see Japan taking the lead in trichromatic printing, a branch of work which has not reached its fullest development in Great Britain, but which at the present time is the subject of close experiment in Japan, where the color sense, if I may so express myself, is probably keener and acuter than in these sombre islands of the North Sea.

### THE NATIONAL RECORDS AND PHOTOGRAPHY.

Clearly destined to remain indispensable in modern art, science, and industry, photography in the new century should look not without hope to more recognition at the hands of the State than it has hitherto received. This is an age of printers' ink and paper. Authorities are agreed that the greater part of the printed matter now sent out from the press is doomed to early destruction. The records of our times are being written, if not in sand, at least in a substance not more capable of resisting the tide of years—wood pulp. Of the myriads of books and newspapers, composed of such highly fugitive materials as paper and ink, that are being issued from the press, what residuum will be left for the historian of the twenty-first century to examine? Photography, by its own work, and not what is typographically printed about it, will live, it may be conjectured, to tell the story of its own evolution and progress in reduced platinum and silver, and it is therefore consoling to note that the Government departments are showing increasing inclination to take advantage of the quality of comparative permanence which photography affords in the production of official documents. Still, what is done in the matter is at present small and half-hearted. It is disconcerting to reflect (and I have been assured that this is the case by historical students) that what may be termed the first-hand history of the country is in process of rapid decay. By "first-hand history" I mean the priceless manuscripts at the Rolls Office and other centres of national records, which, through constant handling and the changes which time induces, more particularly in matter of organic origin, are fading or decaying. It would be a great step, but one for which posterity would be grateful, if the State resolved, before it is too late, that its essential records should be reproduced in permanent form by means of photography. It is tolerably certain that, unless some such course be taken at an early date, the student of history in future centuries will be searching for his references literally in a dust heap composed of decayed skins and papers upon which here and there some undistinguishable hieroglyphics in printers' ink or gallate of iron will be faintly visible and the meaning of which no man will be able to fathom. All the same, while we congratulate ourselves on the permanent nature of photographic impressions, let us not be deaf to the suspicion of fugacity which has decidedly attached itself to the now universal negative process, that of silver in

gelatine. Recollect that this development of emulsion photography is barely a quarter of a century old; hence, sufficient time has hardly elapsed to enable us to speak with confidence as to the unalterability of the results, especially in face of the undoubted evidence, recently published by Dr. Roberts, that star images in gelatine actually fade. I possess many glass collodion negatives nearly half a century old which in fineness of deposit and sharpness are to my eyes perfection. The images, in fact, so far as it is possible to discover, have not faded or deteriorated in the least. The careless way in which modern gelatine photography is so often worked makes it doubtful if, twenty-five years hence, the larger number of negatives that have been made will stand the test of such a critical examination as will most collodion pictures. But it is impossible to foresee what time, the greatest of all chemists, has in store for us in photography or anything else. I conclude with the new-century aspiration that, as facilities for an adequate study of photography in its manifold divisions and subdivisions do not at present exist, the great teaching centres will one day consider it desirable to include the subject among the higher branches of scientific work, and that recognized professorships of photography will be instituted at the universities.

## THE NEBRASKA ASSOCIATION.

THE Executive Committee of the Photographers' Association of Nebraska, consisting of President H. Lancaster, Omaha; Vice-President J. Leschinsky, Grand Island; Treasurer W. P. Fritz, Fremont; and Secretary Alva C. Townsend, Lincoln, met in Lincoln a few days ago and fixed the date of the annual convention, to be held in Nebraska Art Hall, Lincoln, May 21–24th next.

They report the Association to be in a prosperous condition, and the plans adopted for the work of the coming convention promise to bring a large attendance of photographers.

A general outline of the programme and prize list follows:

*Programme.*

May 21, at hotel, 8 P. M., informal reception.

May 22, Art Hall, 10 A. M., business session. 2 P. M., paper demonstrations. 8 P. M., business session and stereopticon entertainment, consisting of transparencies from negatives made by Nebraska photographers, projected on the screen for criticism and discussion.

May 23, 8.30 A. M., demonstration in posing and lighting. 10.30 A. M., paper demonstrations. 2 P. M., Association will go to Lincoln Park, where there will be field sports. 8 P. M., business session and art lecture, with art criticism by Miss Hayden, of Nebraska University.

May 24, 8.30 A. M., demonstration in lighting and posing. 10.30 A. M., closing business session.

*Prize List.*

*Grand Portrait Class, Open to the World.* Six portraits, no restriction as to size, one gold-lined medal.

*Highest Honor.* Open only to Nebraska photographers. A ribbon of honorable mention will be given to each member having a picture accepted for the salon. The judges will select from all exhibits only such pictures as have great merit and shall be deemed worthy of becoming part of a permanent collection. The pictures then selected shall become the property of the Association. Not more than one picture from any exhibit shall be thus chosen.

*Sweepstakes.* Open to any photographer who is a member of the Association, regardless of the class in which he or she exhibits. The prize will be a silver loving-cup, to be held by the winner one year, or until next meeting, at which time it is to be returned to the Association for competition again. Anyone being awarded this cup in three successive meetings will become owner of same. Required, six pictures nine inches or larger.

*Standard Class.* Twelve cabinets, in one frame, without glass. First prize, gold medal; second prize, silver medal.

*Class A.* Open to photographers in towns of 5000 or less. Twelve pictures,

any size, framed in one frame, without glass. First prize, silver medal; second prize, bronze medal.

*Class B.* Open to photographers in towns of 3000 or less. Twelve pictures, any size, framed in one frame, without glass. First prize, bronze medal; second prize, ribbon.

*Class C.* Open to photographers in towns of 1500 or less. Twelve pictures, any size, framed in one frame, without glass. First prize, bronze medal; second prize, ribbon.

*Class of Specialties.* Six pictures, any size, not made under a skylight. First prize, silver medal; second prize, bronze medal.

*Genre Class.* One picture, no restriction as to size. First prize, gold medal; second prize, silver medal.

*Special Class.* Complimentary exhibits. All exhibits in this class will be awarded honorary ribbons. Colorado photographers who join and make exhibits will receive honorary medals. Officers are barred from competition in all classes except interstate exhibits, but will make complimentary exhibits.

Secretary's address: ALVA C. TOWNSEND, Lincoln, Nebraska.

## IMOGEN.

A REPORT BY CHARLES H. BOTHAMLEY.

IMOGEN is a white, odorless, solid substance which dissolves somewhat heavily in water and also in solutions of sodium sulphite, the rate of solution, especially in the latter case, being markedly accelerated by gentle heating.

According to the manufacturers' formula, 33 grammes of imogen, together with 100 grammes of sodium sulphite, is dissolved in 1000 c.c. of hot water. The solution thus obtained is pale yellow in color, and I find that, if the sodium sulphite is of good quality and does not contain more than a trace of alkali as impurity, the imogen stock solution retains its developing properties unimpaired for seven weeks in a well-corked or stoppered bottle, even though the bottle is not completely filled with the liquid. Most probably it will keep in good condition for a much longer time than this, for I find that, even when freely exposed to the air in a dish for many days, the liquid becomes only very slightly deeper in color.

For use it is recommended by the makers that the imogen solution be mixed with an equal volume of a saturated solution of soda crystals of ordinary washing soda of good quality.

I have made experiments with the imogen developer prepared in this way, and gelatino-bromide plates of several of the best known English makers. Under ordinary conditions the image begins to appear in from four to six minutes. The image is gray-black in color and shows very good gradation. The same quantity of developer may be used for several plates in succession. I have found no tendency to produce stains on either the image or the gelatine or the fingers of the operator, and no tendency to produce fog, provided that the plates are of good quality.

Under ordinary conditions the use of any bromide is unnecessary, but if the plates show any tendency to fog, or if there has been considerable over-exposure, potassium bromide may be added in the proportion of ½ to 1 grain per fluidounce of the mixed developer (1¼ to 2½ parts in 1000). It makes development somewhat slower and tends to increase the contrasts in the resulting negative, while at the same time it tends to prevent fog. It follows that the use of bromide gives considerable control in cases of over-exposure.

An important point in connection with imogen is that its action as a developer is not much affected by ordinary variations in temperature. Even at 50° F. (10° C.) development is complete in a reasonable time and good opacity is gained, although the process is somewhat slower than at ordinary temperature—*e. g.*, 60° F. or 15° C.

I find that the solution of imogen recommended by the manufacturers is somewhat too concentrated for use during the colder months of the year. Part of the imogen crystallizes out and the strength of the so-

lution becomes uncertain. A solution containing 25 grammes of imogen per 1000 c.c. instead of 33 grammes does not deposit crystals, and, therefore, remains of definite strength, except in very cold weather.

The use of a "saturated solution" of soda crystals also introduces a certain degree of uncertainty, which seems to me undesirable, and I regard it as much better to use a 20 per cent. solution, which is quite strong enough for the purpose, and will not deposit crystals in ordinary cold weather.

The formula that I recommend is, therefore:

*Imogen Solution.*

| | |
|---|---|
| Imogen . . . | 25 grammes (½ ounce). |
| Sodium Sulphite . | 100 " (2 ounces). |
| Water, hot, to make | 1000 c.c. (20 ounces). |

*Alkali Solution.*

| | |
|---|---|
| Soda Crystals . | 200 grammes (4 ounces). |
| Water, to make . | 1000 c.c. (20 ounces). |

I have made comparative experiments with this formula and with that recommended by the manufacturers, and find no appreciable difference in the time of development or the character of the resulting negatives, while the somewhat more dilute solutions of the new formula are more economical and are of definite strengths.

Imogen answers very well for "stand development," and for this purpose the ordinary developer is diluted with from eight to ten times its volume of water, according to the rapidity or slowness of action desired.

Imogen may also be used for the development of lantern-slides and transparencies on gelatino-bromide plates, and gives images of a pleasant, warm color, with good gradation and without any clogging up of the shadows. For this purpose it is better to use a 10 per cent. solution of soda crystals instead of the 20 per cent. solution used for negatives, or, what comes to the same thing, the developer may be mixed as follows:

| | |
|---|---|
| Imogen Solution . . . . . | 2 parts. |
| Soda Solution (20 per cent.) . . | 1 part |
| Water . . . . . | 1 " |

A small quantity of potassium bromide is useful to give increased contrasts.

Imogen is also a very good developer for bromide paper, and for this purpose the same formula should be used as for lantern-slides, and some potassium bromide should be added when printing from flat negatives. The action of the developer is gradual and regular, and the process can be stopped at the right time by quickly rinsing with water. Several prints can be developed simultaneously if a sufficient volume of developer is used, and several prints may be developed in succession in the same quantity of developer. The color of the image is a very good black. No clearing solution is necessary.

## THE NATIONAL ASSOCIATION AND CONVENTION.

THE official report of the executive meeting of the P. A. of A., given on another page, contains several features which will surprise the craft. In this report we see the first move of the new President, Mr. E. B. Core, and the policy which he and his associates briefly outline in the report is one which commends itself to the intelligence of the profession.

The cash balance in favor of the Association is at least twice as large as that reported in any recent year. This is a good sign, and emphatically indorses the wisdom of locating the convention at Milwaukee last year instead of Celeron or another Eastern point. The Western photographer wants the convention and is apparently disposed to pay for it. His willingness to take advantage of such opportunities deserves further encouragement.

Since the abolition of prize giving will not drain the resources of the Executive Committee, the substantial cash balance should enable the officers of the Association to provide educational features which will make the Detroit meeting memorable in the history of American professional photography. Details of these features are very desirable and will doubtless be made public at an early date.

The chief feature of the report, however, is the decision to abandon all restrictions governing pictorial exhibits, the abolition of prize or medal giving, awards, classes, etc. This is, indeed, a radical experiment, and we will watch the outcome with ab-

sorbing interest. Whatever reasonable doubts we have of its success—as something for which the fraternity is scarcely prepared as yet—there can be no question but that a written criticism for the individual exhibitor, such as is promised, is of immensely greater value than any medal can be—except for advertising purposes. Every sensible photographer, therefore, will support this new movement on the part of the Association.

The "Advertising Committee" is another new feature which may "fill a long-felt want." In past years the advertising and publicity work of the Association has been left to the photographic journals. The pages of this MAGAZINE for the past thirty odd years show how generously the photographic journals have done their part. Whether the Association's officers have given the journals that courteous recognition their work deserved is quite another story. It has always seemed strange to us that the journalist, although required to pay his annual dues like every other member, is not allowed to vote or actively participate in the government and affairs of the conventions, simply because he is a journalist.

The time and place of meeting chosen are alike admirably fitted to the convenience and comfort of the fraternity. Detroit is a lovely city, and a week there in August will prove a delightful holiday. An unusually large attendance may, therefore, be looked for.

The various committees selected for special purpose are well made up, and their members are known as men of common sense as well as practical enthusiasm. We look for an active campaign for the "Educational Convention of 1901" between this and August 1st. This is necessary, as a great deal of hard work will be required to convince the average professional that a convention without prizes can really be more advantageous to him than the usual lavish distribution of medals and diplomas.

May we suggest that some definite provision should be made for the placing before the craft of an energetic statement concerning "Photographic Copyright and its Importance to the Photographer." The subject is one of vital interest to the profession and should have a prominent place in its conventions.

The proposed changes show a new spirit worthy of the new century. We congratulate President Core and his associates upon their courageous move, and urge our readers to recognize that at last we are promised a true convention of craftsmen gathered together for the improvement of their work and working conditions. Success to the Educational Convention.

EDWARD L. WILSON.

# EDITOR'S TABLE.

MR. G. W. PACH, of the firm of PACH BROS., went to the convention at Milwaukee last summer with some very fine specimens of his firm's carbon work. Three portraits, beautifully framed in gold, and two groups, several fellow-photographers admired so much that he put them on exhibition informally, and at the close of the convention, when he went to remove them, he found some one had attended to the "removing" process in his absence and without his instructions.

Since the convention he has done much letter-writing, but every clue to the whereabouts of these carbons has turned out futile. Mr. PACH is very anxious to secure them, and if the party or parties who took them by mistake, or just to study their good features, will return them by express, Mr. PACH will pay the freight, the boxing, and send a neat little check in the bargain.

STILL they come. The *Philadelphia Evening Telegraph* says that "Professor LUBIN is to life photography what EDISON is to electricity. He is the greatest living authority on the art, and his fame extends to all European, Asiatic, and Australasian countries, where thousands of his pictures are shown daily. It was due to LUBIN that life pictures of boxing matches and prize fights are reproduced. He has reduced the art to such a condition that every motion can be faithfully reproduced by films and shown on canvas." Perhaps when the Transvaal troubles are over his fame will strike Africa also, and then perhaps America will wake to the possession of greatness. Meanwhile we learn that "Philadelphia has long been the first city in America in photography, and Professor LUBIN is easily at the head of life-motion photography, not only in Philadelphia, but in the United States."

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of:

# Agfa-Intensifier.

Patented. Name protected.

**A One Solution Intensifier.**
**Only to be diluted with ten parts of water.**
**Keeps indefinitely.**

**Complete Intensification in one Manipulation.**
**Ideal intensifying process.**

| 4 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $ —,60 | $ 1,— | $ 1,75 |

# Agfa-Reducer.

Name protected. Pat. applied for.

**A permanent dry powder**
**Unequalled in simplicity:**
**Only to be dissolved in 10 parts of water.**

**Complete reduction takes about five minutes.**

$ —,80 per original bottle of 4 oz. with **screw-lid and hollow glass-stopper, serving as a measure.**

$ 1,—per box of ten glass-tubes containing ten grammes each.

# The modern Developers:

IMOGEN ✤ EIKONOGEN ✤ RODINAL
AMIDOL ✤ DIOGEN.

Patented.

Pamphlets on developers, second enlarged edition, free on application

Pamphlets on developers, second enlarged edition, free on application

Sold by all Dealers

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 531.
MARCH, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

BAKER STREET, LONDON. By a Special Correspondent . . . 73
NATURALNESS. By Arthur Sugden . . . 77
FALSE IDEAS CONCERNING DEVELOPMENT. By Chapman Jones . . . 78
THE SPEED OF PLATES. By William Gordon . . . 80
TWO METHODS OF COLOR PHOTOGRAPHY . . . 81
A SUGGESTED UPWARD MOVEMENT. By Loren Clinton . . . 83
ON OBSERVATION . . . 85
SUGGESTIONS ON PORTRAITURE. By W. E. Tindall, R.B.A. . . . 87
CHIPS FROM A PHOTOGRAPHIC WORKSHOP . . . 88
OUR PICTURES . . . 89
STUDY OF THE WORK OF WELL-KNOWN ARTISTS. By G. LePan Newstead 91
PHOTOGRAPHIC COPYRIGHT. By George Vaux, Jr. . . . 92
WHEN IS A PLATE FIXED? By Prescott Adamson . . . 94
PRIZE LIST OF THE PENNSYLVANIA CONVENTION . . . 95
THE SINGLE-PRINT AND HOLLINGER'S METHOD. By William E. Ward . . . 97
PROFESSIONAL PORTRAITS OF CHILDREN. By John A. Tennant . . . 99
NEWS FROM THE CRAFT . . . 102
THE PHOTOGRAPHERS' COPYRIGHT LEAGUE . . . 104
THE IOWA CONVENTION . . . 104
THE AGFA-INTENSIFIER . . . 105
THOUGHTS CRITICAL AND ARTISTIC . . . 106
WATER . . . 107

OUR PICTURES:

"A Clever Example of Studio Portraiture." From a negative by William Gill, Colchester, England.

Engravings from Photographs by Henry H. Pierce, Evan D. Evans, H. C. Myers, Thuss Bros., J. H. Kemp, and W. E. Buehler.

EDWARD L. WILSON,
289 FOURTH AVE: NEW YORK.

ENTERED AT N Y POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY

Fine money


# MAKE NO MISTAKE

The practical photographer who *feels* the need of inspiration in his work; who wants to *know* what his fellow-workers in the craft are doing; and who wants to *see* what the best workers are doing, must

## SUBSCRIBE FOR

# WILSON'S PHOTOGRAPHIC MAGAZINE

Plain and Practical Information on Practical Work; Helpful Papers on Interesting Topics; All the News; and a Liberal Selection of Pictures Carefully Reproduced and Printed.

*A PROGRESSIVE RECORD OF THE PROGRESS OF PHOTOGRAPHY SUCH AS CAN'T BE HAD ELSEWHERE*

## OLDEST and BEST

**Three Dollars Per Year**

**Six Months for $1.50 Current Issue, 30 Cents**

**Don't Miss a Number**

---

**EDWARD L. WILSON**

**289 Fourth Ave., New York**

A CLEVER EXAMPLE OF STUDIO PORTRAITURE

By William Gill, Colchester, Eng.

# WILSON'S PHOTOGRAPHIC MAGAZINE

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. MARCH, 1901. No. 531.

## BAKER STREET, LONDON.

BY A SPECIAL CORRESPONDENT.

In lieu of a Fifth Avenue, London has a "West End," and its leading photographers may be found in several streets, while single ones are dotted in all directions. The streets more intimately associated with the fraternity—those down which the provincial photographer wanders when he comes idea-hunting to town—are Regent Street, Bond Street, and Baker Street. Baker Street is, in a measure, similar to Broadway, New York; for its glory is eclipsed by newer and more glorified streets, and it holds several strong, old-established firms who keep their customers without following the stream of fashion to newer districts. The street itself is one of the innumerable short north and south streets of London. For a few yards it is known under some other name, becomes Baker Street for a short quarter of a mile, and as suddenly becomes, under a third name, a double row of most respectable boarding-houses. The houses on Baker Street are mostly of four stories, and were built at a time when roominess was essential. Now they are mostly occupied, as to the ground floor, by broad display windows, and above are show-rooms or work-rooms of the various firms. Baker Street is a fairly quiet thoroughfare, along which cabs and mediæval 'buses drive. Seen on a normal winter day it develops considerable "atmosphere" at one hundred yards distance, and at three hundred yards melts into the yellow oblivion of a slight London fog. If it is noon a slightly brighter splurge on the fog to the south tells that the sun is brightly shining in a cloudless sky, but helplessly beating on the uppermost strata of the veil. There are some nine photographers in Baker Street, of whom two-thirds may be considered as leading men. The photographer usually occupies the entire building, and this gives him a wealth of display space beyond the usual. Whether this is entirely to the advantage of the photographer is doubtful; it may help business, but is rather severe on the reputation of the photographer. A display usually means a packed window, and the inevitable result is much work not of the best. The photographer is notoriously careless in judging his own work, and display is often treated in the most perfunctory fashion. The resulting impression is at first unfavorable to the London work, for the bad work is aggressive where the good retires; and it is not until a very careful examination that it is seen that if 80 per cent. of the work were weeded out there would be left a display exceeding in number of prints that of the average New York case and fully equal to it in quality.

Another thought that suggests itself is that the London photographer needs a thoroughly good illustrated *professional* journal that will not only give him technical information but will hammer a few absolute facts into his head. This remark is suggested more particularly by the prevalence of the vignette—the commercial vignette of fifteen years ago. This is often used absolutely without discrimination, and it is no surprise to see a notice in one of the windows, "vignettes charged extra." The worst case of vignette was in one of the

best displays. A baby's head, against a dark background, was sharply graded off, with the old commercial "pear-shape," into the white paper. The dark effect vanished suddenly at the baby's shoulders, for the little dress was white, under-exposed and hard, and indistinguishable from the white paper into which it merged. Seen placed back in the window, a halo of background was the one insistent thing, and that "shouted" across half the breadth of the street. Not only were there many *bad* vignettes, but there were very few good ones.

Thomas Fall, "photographer to the Queen by royal warrant"—such appointees are plentiful—has two large windows, one on each side of his entrance. One of these windows is devoted to men—or rather to women and children—and the other to beasts, for Fall is a noted photographer of noted dogs. His window of persons contains half a dozen life-size and several smaller enlargements. These large pictures are evidently in larger demand here than in America. Carte sizes are quoted by the best men, and those below the first rank supply midgets.

Three large frames hold cabinet pictures. A large cut-out mount is pierced to hold from twelve to twenty-four prints. The mounts used are black, the cut-outs are bevelled and gilded, and the whole inclosed in a colored wood frame. Placed, as these frames are, four feet back from the window it is of course impossible to examine them critically.

More interesting is the second window—one which will attract every lover of animals and every admirer of good photography. There is a frame containing some thirty wonderful cabinet photographs of pedigree dogs. Each one is plainly titled with the name of the dog and owner—a commendable plan. They are evidently the work of one who both loves dogs and understands the "points" of valuable dogs. Almost all the dogs are in profile, and in every case their attention has been attracted in some way, and in some very slight way, for there is no tense alertness, the look being almost one of reflection in many cases. One little picture shows a little maiden in white, with her six white, long-haired pets; every one is near perfection. Needless to say every photograph is perfect in its definition, and printed on a fine-textured paper. The rest of the window is filled with enlargements of dogs and pussy cats, with a couple of paintings of landscapes and a colored enlargement of five puppies. The whole is a display which will win the heart of every woman. The frames used for these enlargements are of oiled oak, carved, with or without (usually with) gold strip.

Within a few doors of Fall are Brown, Barnes & Bell, an old-established firm of many branches, and in this one, at least, doing work of only moderate quality, for which they charge a reasonable price, considering their location. Cartes $2.50 per dozen or cabinets $5 is not unreasonable for Baker Street. Their show-case—window it might almost be termed—takes half of a broad entrance. It gives about twenty feet of glass, and the "case" is four feet deep. How closely the trade of any establishment can be graded by its show-case! The expensive enlargements and massive frames of Fall here give place to a few prints ranging near 11 x 14 in size and a preponderance of cabinet prints, mounted singly, and frames usually in silver, of a somewhat rococo kind. On the opposite side of the entrance are three large frames of half-inch mould, once white, with an inch-wide white, flat inside bordering a red-plush ground. These contain cabinet prints. Some of them are on plate-sunk mounts with a pasted-down centre, and with the firm's name on the mount in silver or in gold. These prints are platinotypes, and hard and under-exposed they look. The other cabinets, from similar negatives, are printed on glossy paper, which by bringing out the fullest possibilities of the negatives give just a suggestion of modelling in the faces. Either the vignette or a decorative, accessory-helped background are the prevalent treatments.

Russell & Sons, among the most fashionable and successful of royal photographers, have appropriately decked their windows—a great 18 feet one—with royalty, mostly the late Queen. These are almost all glossy cabinets (price 36 cents each) of the old, old school; very black and very white. As examples of photography some would be tolerated only on the charitable

supposition that they were taken under the conditions which beset the average amateur and that they are of interest as records. The window is relieved of its mourning sombreness by a few colored enlargements, mostly military; bright in the red tunics, with belts and buttons emphasized in the most approved fashion. The color is of a rich, opalescent quality not usually deemed artistic, and the frames are mostly gold. A dozen pictures look attractive, and I hope they appealed to me by their worth and not merely by contrast. They were circular prints, about five inches in diameter, platinotypes, toned slightly warm.

The subjects were heads or half-lengths of ladies. This circular picture is very fashionable here just now, being used more than it should be. The mount is square, about eight inches, slightly granular, with a circular plate-mark showing a margin of about a quarter-inch all around the print. This white mount, with its plain depression, is used in all sizes both for round prints and those of the ordinary shape. The name is printed in black, usually from engraved script but occasionally from type; the name in the left corner and the address in the right.

Close to Russell & Sons a photographer rejoices in seven cases a yard square, with an extra one on the corner of the entrance. It is again work at $5 a dozen cabinets (platinotypes 50 per cent. extra). Vignettes are favored, and when not used they give place to the old-time background and accessories, including the rustic (or baronial?) balustrade, palms, and basket of artificial flowers. Some of the prints show careful lighting, and his retouching gives a sharp-cut finish to the features which will doubtless please the customers.

Photographers of children are always interesting, and we evidently have such a firm in Robert Faulkner & Co. But the result is scarcely successful. Fifteen cabinets of children are woefully posed and commonplace, and this is the more strange, as some carbons exhibited beside them (and also of children) show much better and more feeling work. This evidence of thought is also apparent in four 10 x 12 three-quarter lengths of men against dark backgrounds relieved by a patch of white. In spite of one or two very obvious faults they are interesting as attempts out of the ordinary groove.

There are in one of these cases several miniatures (enamels), and as several firms in Baker Street show miniatures I will deal with them as a whole, for I cannot speak favorably of them. Strictly speaking, they are not miniatures but small-sized photographs, for there is too often no attempt at any line or composition, or indeed any pictorial or decorative treatment whatever. It would seem as though these photographers had no conception of such work as that turned out by Dudley Hoyt, Benjamin, Kemp, and others, work illustrated in *Mosaics*, 1901, and in the MAGAZINE during the past year. These attempts are ordinary work reduced to some two inches in height and burnt into a piece of china. Some are in red—a weak, flat red, with dirty whites, very thoroughly ineffective; and there is a custom of vignetting about one-eighth of an inch all around the edge, which gives a result still more degraded. It is not too severe condemnation to say that some of these miniatures (not all) would be in their proper class if made up as 10-cent button pictures.

Next to Faulkner's is a well-known name, "Histed"—for he uses it here in quotation marks—who poses as "photographer and art publisher," has again a large window in which he shows thirty-five framed portraits.

It is another palpable case of overdoing it. Half-a-dozen prints carefully selected from the lot would do credit to the producer, but the display as a whole is less convincing than the one or two examples which he displays in New York. By the way, where is Histed? I thought I had left him in New York, but here in London they effusively assure me that Histed is here, and clinch their confidence by saying that "there are two of him here, in spite of New York." I rather incline to think that a good understudy is responsible for the work. Histed's work, like Hollinger's, is a kind that can, to a certain point, be imitated, and much of this work suggests such an origin. That there are here a number of pictures by Histed is doubtless true, but some of them are violently lighted faces against dark backgrounds, far from pleasing. It is easy to pose a figure against

darkness and easy to suppress all except the face or a part of the face; but woe to the man who does it without knowing why! Some of these portraits are violent almost to vulgarity—the sort of picture which should have its face turned to the wall—and suggest those extremest effects into which Doré occasionally lapsed when illustrating some weird, mythical tragedy. Histed's frames are almost all dark, and are good when placed against a black background; but he occasionally uses Rembrandt mounts, and the effect of a two-inch margin on the lightest part of one of these mounts dividing a black frame from a black background may be imagined.

Alfred Ellis & Walery, a firm almost directly opposite Histed, make a strong display of royalty; cabinets 36 cents each. Again we have the lavish use of space for display, for not only is a handsome window devoted to it, but the passage ending in swinging plate-glass doors leading to the first-floor studio is lined with a dozen large show-cases. Four of these tall mahogany show-cases are filled with a large oak board, each pierced with twenty bevel-edge openings for prints up to 10 x 12 in size. Six cases contain framed colored portraits or carbon cabinets, and two contain miniatures hung against dark red. The colored miniatures are doubtless a profitable line, but the uncolored ones (except those toned red) are more pleasing. Here as elsewhere glossy paper holds its lead. Negatives are made sufficiently hard for it—almost too hard. The lighting of royal ladies, in evening dress, from the side gives, close and sudden against shadow, an ivory, lustrous whiteness to arms and neck. It doubtless "takes," though it is not pleasing. One or two of these hard negatives have been used for platinotype—and the prints have yellowed!

The prices quoted are: Miniature enamels from $7.50 each; cartes, "silver process and two proofs," $3 per dozen; cabinets, $7.50 per dozen; boudoirs (5 x 8), $15 per dozen; platinotype prints, 50 per cent. extra.

After so many extensive displays it was with a feeling almost of relief that I reached the doors of Elliott & Fry and found not a single specimen on view. I pushed through the swinging doors into a small hall some sixteen feet square. Around it ran the stairs to the top of the house—three stories—and as I looked up I could see pictures hung around the walls; but except three enormous enlargements they were paintings—many of them water scenes and scarcely attractive on a cold winter's day.

Window & Grove, again, have no prominent display. All that face the street are two picture portraits, one on each side of the door. Each is a 15 x 18 red carbon of a lady—those ladies with wavy hair rippling over their shoulders and downward to the margin of the print, such as we so often see in photography. Just outside the entrance door are two other frames, one containing a dozen theatrical subjects, the other eight circular sepia platinums. Six of these latter are mounted on rather effective brown mounts with the usual plate-sunk centre. The door, standing open, is a good, old-fashioned English one, of mahogany, with name-plate, letter-box, door-knob, knocker, and lock all of highly burnished brass. Inside the door one side of the passage is fitted with a large case divided into four. Three of these divisions each contain fifteen cabinets. A piece of unbleached white board has been used for the mount, and it has been carefully squared and pencil-marked to get the prints placed with precision; and every print has been so placed and well pasted down. Somehow, the suggestion of someone so carefully attending to this detail and ignoring any showy or expensive mount or arrangement is pleasing. The fourth case contains eight mounts similarly treated. In many ways this is the best display in the street; there is evidence of much careful, thoughtful work. A frame on the opposite side of the passage contains twenty-four panel portraits of Ellen Terry in different characters. Three large and good carbons of Miss Lily Hanbury are placed over a case containing framed pictures. Another case contains some eighteen theatrical portraits. Imagine this display of actresses, and not a grin in the lot!

It would be easy to discuss Baker Street and to attempt to analyze it, but whether it would be wise or not I do not care to decide. Among many things just one prevalent thought arises, and as it is one

which cannot unduly hurt susceptibilities I will state it. The trimming of prints has often been spoken and written of as one of the minor details of photography. Such displays as those just seen suggest that it is a major and very vital detail, and it is devoutly to be hoped that English photographers will take a very real step forward by emancipating themselves from traditional sizes.

## NATURALNESS.

BY ARTHUR SUGDEN.

THE art of "not posing" has been much written about of late, and the plan of seizing the unconscious pose rather than of creating a graceful composition is considered as one of the discoveries of latter-day workers. But we of a younger generation sometimes receive a humiliating but wholesome shock in looking over the work of our predecessors. We are ready to grant the preëminence of their technique, but not so open to admit their careful good taste and knowledge of things beautiful. But often, fortunately, the admission is forced from us that the old days saw work as perfect as that of to-day, and perhaps they saw less bad work. Forty years ago A. H. Wall, now a veteran among us, spoke of "expression," and his words would sound in place if addressed to a convention in this year of grace.

Some of our greatest painters have demanded for one portrait as many as fifty sittings, not, of course, for general outlines or mere manipulatory details, but for the embodiment of an expression which should most forcibly depict the very soul, as it were, of their model. The accomplishment of this lofty aim is commonly held to be the great point of superiority which the painter claims over the photographer, but why? The painter must see the expression before he can catch it; and if you secure for your camera that same expression, in less time than the draughtsman needs to impress it on his memory or transfer it to his canvas, the art which can depict a cannon-ball in motion will seize and render it permanently visible. Those photographers who are not satisfied with "a mere map of the face" may and do frequently secure expressions as beautiful and far more truthfully characteristic than any I have seen in drawings or paintings. The great point is, either by the art of your conversation or by similar means, to call to your sitter's face such an expression as may be most pleasing in the picture.

Now, this is not done by solemnly impressing his or her mind with a nervous fear of moving—better spoil a dozen plates than do this—but by endeavoring to make your sitter feel perfectly at home and unrestrained by your presence. Nothing is more distressing than photographic portraits of uncomfortable looking people, upon whose faces we at once read a feeling of nervous apprehension. But these are not more objectionable than grinning likenesses. Should the sitter desire to smile, the smile should be a faint one. If in real life the sitter is noted for a merry expression, a mere suggestion of it—just a latent twinkle—will sufficiently suggest the full smile to the sitter's friends and will meet with much approval. However beautiful a smile may be flitting like passing sunlight over the face, when it is seen fixed and unchangeable it too frequently conveys the idea of a mere grin or piece of affectation.

Fortunately for us, we are in an age of steady photographic improvement. The abolishing of the universal full-length, so often supported by a pillar and by—in the case of man—a "high hat," has been one of the greatest forward movements. We seldom—too seldom—see a male full-length from any high-class studio, but when we do, how different from the stereotyped old timer! The head and shoulders and the half-length have proved a somewhat cowardly refuge for the photographer at a time when he began to see the faults of his old full-length and yet began to taste the difficulties of improvement. Now he is gradually finding his way back, and though the

larger head will inevitably, for several reasons, hold its popularity, we yet will from time to time see full-length poses that will be altogether satisfying. In full-lengths to-day we are strongest in poses of women; not that we make more poses of them—that is a matter of course, consequent on their being our best customers—but because our poses are of the living, high-spirited, happy woman, and not poses of inaninity.

We are far indeed—the leaders among us—from the old regulation pose and the head-rest. The former exists only in the cheapest galleries of our large cities, and the latter (except for occasional use) is confined to places where low-priced lenses or dim light make rapid exposures impossible. And we are getting ever further from a conventional mannerism, and if only we live true to our present progress we shall develop more and more toward a strong and pictorial individuality of work.

## FALSE IDEAS CONCERNING DEVELOPMENT.

BY CHAPMAN JONES.

THERE are several matters in connection with development that still remain matters of opinion. In some of these every expressed opinion is more or less right, and the difference is one of degree rather than of fact, and often a difference of point of view. There are, however, some statements which have got so firmly rooted that they have become almost axiomatic; they are repeated from text-book to text-book and are accepted apparently by common consent. It is of little use simply to indicate errors of this kind; they have to be demonstrated over and over again.

It is commonly stated that ferrous oxalate stains gelatine less than the developers distinguished as "alkaline." There is a certain amount of truth in this statement, but it is even more true to say that alkaline developers as a class stain gelatine less than ferrous oxalate. The fact is that the staining or otherwise depends on the conditions of the experiment. It appears that the superiority of ferrous oxalate in this detail was first asserted when alkaline developers were used without sulphites; then, of course, it was true. It remains true if insufficient sulphite is used, but if development is properly done, then ferrous oxalate is inferior in this respect. The slight stain that it gives is apparently unremovable, while alkaline developers, when properly used, give no stain, or if a little it is soluble and may be washed away. We grant at once that the maximum staining power of alkaline developers is greater than that of ferrous oxalate, but it may be added that hydroquinone is able to give far worse stains than pyrogallic acid, though it is generally credited with being a cleaner developer. If the sulphite is properly proportioned (1) to the bulk of the developer (not to the amount of pyrogallic acid or other developing agent in it), (2) to the amount and character of the alkali, and (3) to the time that the developer is required to act, and if the subsequent washing is properly done, then the advantage, so far as staining goes, will be found to lie with alkaline developers.

Here we would repeat a warning that we have given before, namely, that alkaline developers are none of them suitable for use after mercuric chloride in intensification. They are often recommended as suitable reagents for this purpose (it is generally called "redevelopment," though it is not a development process in any sense whatever), but they fail because of their action on the mercury salt. A part of the mercury is dissolved, and therefore the result is not definite or properly proportioned. Ferrous oxalate, on the contrary, acts definitely and completely.

A statement that is not quite so common as that referring to staining, though it seems not unlikely to become so, is that ferrous oxalate gives less chemical fog than alkaline developers. Here, again, it is simply a matter of properly compounding the developers. Alkaline developers have more constituents than ferrous oxalate developers, and these are all of them very soluble, so that with these the limit to the amount

that may be introduced into the solution is very far in excess of what is required for development. There is, therefore, great scope for error in the compounding of alkaline developers, but very little in the case of ferrous oxalate. Too much of the iron salt shows itself at once by the production of a yellow precipitate in the solution or an unsightly yellow deposit on the plate. It is nothing but the abuse of the great power that photographers have in the use of alkaline developers that leads to the idea that they give more chemical fog than ferrous oxalate.

Another example of the abuse of power and consequent complaint of the result is seen in the idea that metol and eikonogen give thin negatives. It is quite true that these reagents will give thin negatives, but the inference that is always understood, that they lack the power to give good density, is quite false. There is no need to add hydroquinone or any other substance for this purpose. The possibility of easily getting thin, delicate images with metol or eikonogen is an additional advantage that these reagents possess, and not by any means their chief characteristic. It is not perhaps impossible, but it is certainly more difficult, to get uniformly thin negatives by the use of pyrogallic acid, because generally the image is not all visible until some parts have gained considerable density; but the fact that the other substances can be made to give a complete image before any part has become sufficiently dense is no reason why development should be stopped too soon, and the reagents branded as being only able to furnish a thin image and needing for ordinary purposes to be helped on by something else.

That "gradation is fixed by the exposure" is a statement originally made, we believe, by Messrs. Hurter and Driffield, and one that still appears to find acceptance, though its originators have withdrawn it. Some may think this too strong an expression, but the admission that anything else than the exposure modifies the gradation is a practical withdrawal, because no one would ever dispute that exposure is one of the factors in determining the gradation, and indeed the chief factor. It is time that the partial truth and false inference conveyed by this expression were allowed to condemn it to be left behind as something that has perhaps done a little for us, but that is now a positive hinderance.

The last idea in connection with development to which we will now take exception is the description of it as an electrolytic or micro-electrolytic action—that is, an action that starts from a number of invisible and undetectable nuclei produced by the direct or indirect action of light and then proceeds without the help or intervention of any outside force. It is exceedingly easy to formulate such theories, but if they are of no use and are in apparent contradiction to well-known facts, we submit that they ought to be discarded. Of course, it is easy to quote facts that may be explained by this hypothesis, but as much as this may be said in favor of the existence of phlogiston. There is probably no fact better known in photography than that development has a definite stopping point, that the density obtainable (except by fogging) is limited by the exposure, and that the effect of the light, therefore, is not a mere starting of the development. In this, of course, we refer to the usual gelatino-bromide emulsions, as the exposure effect is well known to be different in other cases. Development may be electrolytic in the sense that all chemical effects may be electrolytic, but if the hypothesis is given this general meaning it becomes useless in its vagueness, and it is not in this sense that it is intended to be accepted. The original idea was that the light merely produced the nuclei and that by development the image grows from them, so that the maximum density that a plate will give can be produced from the minimum exposure that will affect it; and, we might add, the image ought to grow at an increasing rate as development proceeds, because the amount of metallic silver—that is, the size of the electrodes or the number of the electrodes—is continually increasing. Of course, the facts point to the idea that development in gelatino-bromide plates affects only the silver salt that has been made developable by the exposure, or, at most, a very little more. The vigor of the disruption of the silver bromide may, so far as we know, lead to the decomposition of some bromide immediately adjacent that has not been affected by the

exposure; but if there is any such spreading action, the effect so rapidly dies out that it is almost or quite impossible to prove that wherever reduction of the silver salt takes place in development the light has not preceded development and produced its characteristic change.—*Camera Obscura.*

## THE SPEED OF PLATES.

BY WILLIAM GORDON.

Our English friends, who have for years vexed their souls with worrying over the combined bath for Aristo papers, are now cogitating over the important question of plate speeds. Over on this side we usually favor a rapid plate, with a warning against under-exposure given for the especial benefit of those inexperienced workers who are apt to snapshot everything in sight without any regard either to size of stop or brilliance of weather. But in Britain they are urging the curious reason that rapid plates tend to over-exposure. The argument is somewhat specious, and is used not so much perhaps because of its soundness as because it is intelligible to the great army of amateur plate spoilers. It is well known that a brilliant summer day in America possesses more actinic light than a similar European day. The American light is commonly spoken of as one-third faster. How this comparison has been arrived at we cannot say, nor can we certify its absolute correctness. The broad fact, however, is certain. Add to this that England sees fewer days of brilliant sunshine and a corresponding increase of those days in which atmosphere is—to state it mildly—a dominant factor, and it will be seen that over there the average snapshot fate is not a slight but a hopeless under-exposure. For this reason time exposures are the normal thing, and on this time basis it is, of course, very easy for the man who works to no rule or system to make too long an exposure. And an over-exposed rapid plate does not admit as great a latitude in development as does a slower one. A slower plate gives a negative in which there is a finer gradation and a negative with a finer grain—such is the theory. This is to a certain extent correct, and where a picture is intended for enlarging the finer grain of the slow plate is preferable. But, unfortunately, the pictures which most commonly need enlargement to an undue extent are largely those of the snapshot class—pictures of some passing event or of some subject obtained under difficulties; and in work of this class the question is not what is theoretically correct, but what is practically possible, and the practically possible is in every case the most rapid plate obtainable. In the branch of work in which we are more especially interested—portraiture—we have two common conditions connected with enlarging. We have first the case in which work has to be done from some print or even from some old ambrotype or daguerreotype. The second case, and the one in which length of exposure becomes a factor to consider, is when a sitting is made for an enlargement. In this case, if the enlargement is to any considerable extent, the picture is intended for wall display or to rest on an easel, and not as a hand specimen. In such a case we often endeavor to increase the sense of grain by using a rough mat or granular paper. We are happy, too, in this country in the frequency with which we are called on to make large direct portraits. This class of work is, in comparison, unknown in England, where the great preponderance of work is done on plates smaller than five by seven inches.

One of the greatest advances in photography has been the shortening of exposure. It has banished the head-rests and given an archaic flavor to those old witticisms about the torture chamber. The rapid plate has banished the pained, strained expression and elevated child portraiture from a level of homeliness and horror to a level of often achieved artistic beauty. Any suggestion made on this side that we abandon speed in plates would be received with derision as a putting back of the wheels of progress. How our brethren on the other side will attain their results if they succumb to the

fashion of slow plates and long exposures it is not for us to guess. But from our American view there is another point to be considered. If we swung back to slow plates we should be bowing to a mere theory rather than to a practical issue.

We know that if we wanted to find any difference in our prints as between slow and rapid plates we should need to hunt for it with a microscope. Our English brethren are usually gifted with a shrewd common sense, and if they do veer around to their slow emulsions the inevitable inference will be that their plate-makers have been found wanting. If in their emulsion making they really obtain the coarse grain which we hear of they are unmistakably behind our American plate-makers in ability. We all know that the more rapid a plate is the coarser is its emulsion; but we know this as an old, old story, and we know, too, even as we repeat it, that it is no longer true as regards American-made plates. Our makers first obtained speed, and then they eliminated, one by one, the disadvantages which used to accompany it. If the English are not scaring up a bogey of the past their manufacturers had better look to their laurels. Some day Pittsburg or some other city will give us the glass we need for support. Foreign glass is stiffening in price, and in spite of his free trade the Englishman goes to Belgium for his glass, for there he can buy in the cheapest market. He has been selling plates at what he considers a cheap price, and he is just a little in doubt as to whether he can continue it, although he is inured to working at a loss. He knows to-day that he builds the finest cameras in the world—he says so, and that is conclusive—but it is a barren honor when he sees studio cameras coming from Germany and every make of camera flooding in from the United States.

The American plate is to-day the most rapid of plates, and although we have all kinds and know when to use them, we use this most rapid plate for nine-tenths of our work without fear of incorrect exposure or of poor negatives. If the Englishman quietly gets down to the reasonableness of slow plates he will find that American plates are beating him in the world's markets—he will find it in any case, for the point of the wedge is in and it will be driven home. And he will find, too, some fine day, that the American plates are in the London stores, and that the rapid American plate will bury his slow, grainless favorite as under an avalanche.

## TWO METHODS OF COLOR PHOTOGRAPHY.

FROM a series of papers on "Color Photography and its Requirements," now appearing in *The Photographic Dealer*, we extract brief descriptions of the Sanger Shepherd and McDonough-Joly methods as of interest to our readers. The first is perhaps the most promising of methods available in England; the second is fairly well known among American photographers, and was demonstrated before the Milwaukee convention, where its possibilities excited considerable comment.

### *The Sanger Shepherd Process.*

Probably the most important process for obtaining photographs in natural colors is the process named after its inventor, Mr. Sanger Shepherd, and certainly no name is more prominent in connection with color photography, after Mr. Ives, than Mr. Shepherd. The colored result in this instance is produced by the superposition of three pigmented images; a lantern-slide is made which can be projected by means of any ordinary lantern, hence, there is no need for any special apparatus for viewing the finished pictures. The *modus operandi* for preparing the transparencies is very simple and somewhat as follows: Three negatives are taken by means of a repeating or multiple back, which back can be fitted to any ordinary stand camera without interfering in any way with the use of the camera for ordinary work. This repeating back is fitted with a set of measured color screens, namely, red, green, and blue-violet, which are specially adapted for use with the Cadett spectrum plate. The size of plate used in this process is 8 x 3 1/3 inches, and the dark slide which takes it is

so arranged that the three exposures are received upon the same plate, only one movement being necessary to change both the plate and color screen. Some little experience is necessary to hit the correct relative exposures and to obtain the negatives of the correct density for printing. In a good light, and using the plates we have already mentioned, the relative exposures would be about 9, 3 and 3 seconds respectively, with the lens working at *f*/22. To assist the operator in obtaining the correct density Mr. Shepherd has introduced a "Universal" developer, which very materially assists toward this end. After the negatives have been developed and finished in the ordinary way three prints are made by means of the "carbon" process on thin celluloid films. To anyone conversant with this method of printing it is quite an easy task, and to those who are not it is a process which can be easily learnt from the many excellent hand-books on the subject, and will be found quite simple and most fascinating. These impressions from the negatives are then stained by immersing them in three separate solutions of aniline dyes. The print from the negative taken with the red screen is immersed in greenish-blue dye; the print from the negative taken with the green screen is immersed in pink dye, and the print from the negative taken with the blue-violet screen is immersed in yellow dye. Aniline dyes are used on account of their great purity and the amount of control that can be exercised in using them. In practice the greenish-blue dye is used first, and when the film is stained to the correct color, which is readily discovered with a little practice, the second film is stained pink to the correct color, and, lastly, the remaining film is stained yellow. These films are then carefully placed one over the other and mounted between glass, exactly the same as an ordinary lantern-slide, care being taken that the films are in juxtaposition without any intervening spaces between. Prepared in this way the slide can be shown on a 10-foot screen with lime-light or a 20-foot screen with electric light, giving most brilliant results. Not only can lantern-slides be prepared by this process, but the apparatus is supplied for producing positives up to 12 x 10 inches. Quite recently Mr. Shepherd showed us some colored photographs made in this way, from paintings by the old masters, which were beautiful, the flesh tints being rendered with absolute truth. The whole of the apparatus for working this process is supplied by Messrs. Sanger Shepherd & Co., and is by no means an expensive luxury. Already there are numbers of amateur photographers in the country who are working the process with admirable results, and it is not too much to say that it is a method of color photography that has come to stay. The manufacturers are endeavoring in every possible way to simplify the process and make it such that it can be worked by the merest tyro with the most satisfactory results.

*The McDonough-Joly Process.*

The last method of color photography to which we intend drawing attention is the McDonough-Joly process. A company, under the title of the International Color-Photo Company, has been formed in Chicago to supply the necessary apparatus and materials for working this process. Although Professor Joly first put this method into successful practice, the interest in it seemed to decline after a time, probably owing to the difficulty that was experienced in the manufacture of the ruled screens. Since the formation of this American company, who, we understand, have bought all the patents of Mr. McDonough and Professor Joly, there seems to have been a revival in this method of color photography, and they are doing all they can to make the process a commercial reality. Ruling machinery has been specially built to enable the firm to cope with any demand that may arise, but whether their efforts will prove successful or not time alone will tell. We have previously mentioned that with this process only one negative is requisite. This is made by placing in front of the plate and in contact with it a "taking" screen, ruled with very fine lines of transparent ink. According to Professor Joly the best effects are obtained with screens having about two hundred lines to the inch, whereas in the McDonough process a screen is used having about five hundred lines to the inch.

The apparatus essential for making a negative by this process is as follows:

1. A chromatic balance shutter, which is attached to the lens.

2. A "taking" screen.

3. Special dry plates, which are known as the erythro plates.

The chromatic balance shutter or filter is used in order to regulate the amount of blue light, which is too strong in ordinary daylight even for the special plates. This filter fits on the lens like a hood, and consists of sectors of mica colored alternately lemon, yellow, and orange. It works much in the same way as an iris diaphragm except, of course, that there is no opening, and can be readily adjusted for sun and for shade.

The "taking" screen is a glass plate ruled in parallel lines with inks of the colors red, green, and blue-violet, numbering about five hundred to the inch, in the order named. It is supplied in a metal frame and can be readily adjusted in any camera. A lever is conveniently placed on the side of the camera, and by this means the screen can be brought into contact with the emulsion side of the dry plate after the slide of the plate-holder has been withdrawn to make the exposure.

The erythro plate is a specially orthochromatized dry plate. After exposure the plate is developed in the usual way, and the negative, when viewed closely, reveals a number of fine linear areas of different degrees of density. When developing the erythro plate only a very dim red light must be used, and the tray should be kept covered during development. The company mention that any good developer may be used, but it must be changed from normal strength by adding double the quantity of water and having it weak in alkali and well restrained.

From such a negative a transparency is made, and this is mounted in contact with a "viewing" screen. The "viewing" screen is a thin glass plate ruled with the same red, green, and blue-violet lines as in the "taking" screen, and in the same order and number. The emulsion side of the positive is brought into contact with the ruled side of the screen, with the lines in register. In this way the red values of the positive coincide with the red lines of the screen, and the green and blue values coincide respectively with the green and blue lines, the result being that we have a positive in the colors of the original object photographed. The positive and screen are now placed in a clamp and are ready for binding. After binding the two together, the same as an ordinary lantern-slide, they should be left until perfectly dry, to avoid any movement of the screen, otherwise the color values will be altered. These "viewing" screens for lantern-slides cost about twenty cents each, but we hear on good authority that this price will be considerably reduced when the makers are in full working order.

Such is a brief outline of the McDonough-Joly process. By these means lantern-slides may be obtained which exhibit the original colors of the object photographed in a remarkable degree. When projected on the screen the lines are so fine that at a very short distance from the screen the eye is unable to separate them, and they merge together in the most beautiful and varied hues, just as we see the colors in natural scenes.

## A SUGGESTED UPWARD MOVEMENT.

BY LOREN CLINTON.

It has been remarked, in the daily press, that there is not in existence a single painting or engraving of Queen Victoria which is accepted as a national portrait by the British nation.

Many "favorite" paintings of Her Majesty have been made during her life, and engravings from them have been widely popular; but, of course, the typical and acceptable one would need to have been painted some time during the present generation, and probably between the years 1885 and 1897. Probably some of the best portraits of Her Majesty have been those miniature reproductions on the postage stamps of some of her colonies, for the "effigy" on the English stamp is in no sense a portrait. The most beautiful one

is a full-face portrait of a young woman, on the stamps of Nova Scotia, one value of which is, or was, printed in black.

But the question which more nearly interests our craft is whether an entirely satisfactory photograph of the Queen has ever been taken. No sitter has ever been a better patron of photography, either in regard to the number of sittings granted or to the courtesy and consideration shown the photographer. Hundreds of negatives have been taken, and hundreds of thousands of photographs circulated, and yet it is doubtful if one is pre-eminently better than the others. Photographing English royalty has become almost a convention, and the old-school work of the type that is sound work and absolutely lifeless has ever been followed. Retouch prettily, burnish heavily, and mount on a cabinet mount, above the photographer's name in gold and the royal arms, and you have an approved picture.

How seldom it is that we see a photograph as the universally accepted portrait of any public man. Indeed it is not usual that *any* portrait is unanimously pronounced satisfactory. Were this due to a multiplicity of good work there would be no ground for cavil; but, unfortunately, this is not the case. And equally unfortunately the reverse is the case. We have seen many photographs of President McKinley. Some few were good, but none great; many were bad, a few atrociously bad. Roosevelt is perhaps a little better off in this respect.

When Abraham Lincoln died wet-plate photography had been practised a dozen years. In this instance we have an accepted portrait of the man, but it is the work of the artist Carpenter, and not of any photographer.

A great portrait painter is born, perhaps, only once in a century. But every generation sees many men of much talent and thorough training in their art, who paint pictures which so embody the inner man of their sitters that even the trained artistic eye cannot discover wherein the greatness lacks. These artists may paint, or etch, or produce their results in many ways, and however produced their work has a distinctive stamp and we fall into enthusiasm over it. Some of these men have elected to work in photography, and if their work is less worthy in this medium than in others there must be some reason for it. Without necessarily admitting the defect (for an admission should be with qualifications) we will discuss the main cause of the defect.

As a minor detail, the man must be a thorough master of his technique. Not merely must he be able to make a perfect negative and get a faultless print. He must know how to handle his light to obtain a modelling which is equally pictorially correct and truthful. He must understand his planes and values and must have mastered the intricacies of tone—the comparative tone of the artist, not the chemical tone of the photographer. Technical mastery is absolutely essential. The man who *appears* to ignore it, and who is successful, is the man who has been ground in the mill of technique.

But the vital factor is a sufficient knowledge of the sitter. The better we know a person the more censorious we are of their pictures, for we know more and more of the inner personality and the more look for it in the photograph. Any amateur can take a snapshot of the blind beggar whom we pass daily, and we all declare it a speaking likeness; but the most skilful professional is in despair when he turns his energies toward photographing his own wife. To get this requisite knowledge means—or may mean—a lengthy interview. We appoint a sitting, and during that sitting we do the best we can and accept the result. Why cannot we, or rather one or or two leaders among us, let a sitting continue until the result is satisfactory. Too expensive? Nonsense! Photographers are obtaining prices beyond the wildest dreams of a dozen years ago, and not "how cheap" but "how good" is fortunately still the motto of many of our most desirable customers. We must at any price (but the price will be success) get rid of the one-sitting and dozen-prints idea in connection with photography. If an entire morning must be passed without a possibility of the best results, let the time go and the sitting be continued next day. If you were an artist you would probably have similarly spent the time in "sizing up" your subject.

A step has already been made in the right direction. Several of our photog-

raphers limit the number of sitters they will receive in a day. Some will take but two, one each, morning and afternoon, and even then complain of the strain. Of course the fewer sittings the higher must be the price charged to recoup the photographer, and presumably the higher price will be offset by the superior quality of the work; if not the dear public will cease to come. If thought advisable cover yourself by a fixed charge for the sitting, and so much each, or per dozen, for prints.

It is to the great credit of photographers that, as technical difficulties in studio manipulations have steadily been lessened, the photographers have as steadily transferred their energies to the obtaining of a higher standard. More time, more ability, and more cost has been put into the work to enhance its worth. The present tendency, and one altogether to be commended, is toward the "unconscious process" in photography.

The desired expression cannot be obtained to order, and especially if the sitter is at all nervous.

But the obtaining of the picture while the sitter is unconscious of it—a thing much desired by some self-conscious folks—is becoming much more common. To attain these results to satisfaction the photographer's knowledge of human nature and of photography as an art must be persistently cultivated.

It may be urged that the suggestion in this paper is altogether unpractical, in that probably but one man could find success on the lines suggested. But every man who takes a forward step in photography draws the whole fraternity with him, and enhanced prices in Fifth Avenue mean better prices in Detroit or San Francisco. Too long photographers have been timid and of little faith. They have been too keen to establish a ratio of cost between a dozen plates and a dozen prints, and too remiss in establishing a personal equation and charging for it.

But photography has been on an upward trend for several years, and so it will continue if photographers prove true to themselves.

## ON OBSERVATION.

One of the most indispensable faculties in business is that of observation. It is indispensable in every occupation. Without it a man goes through life contending against great odds. He is always blundering into difficulties, always up to the chin in a sea of troubles, always losing valuable hours and days of his life and wasting money in pursuits which might be avoided by the exercise of this inestimable faculty. There are so many men who go through life with eyes and ears open, yet, so to speak, neither seeing nor hearing anything. They knock their heads against a pillar or a brick wall for want of the necessary observation to teach them where to expect to find a pillar or a brick wall, and even with the unpleasant experience which such contact entails they take such little advantage of observation that they blunder into the same obstruction the next day. An old sea captain who was asked if he knew where the rocks were in a certain harbor showed his keen sense of observation when he replied, "No, sir, but I know where they ain't."

But while observation teaches us what to avoid, it also prompts us to the achievement of great things. Genius, talent, inventiveness, knowledge, experience are synonymous with observation. Consider the lives of the great men of this or any other age, and it will invariably be found that their greatness arose from their possession of the faculty of observation, which led them to conceive some great invention or make some grand discovery, owing to some simple circumstance which had impressed itself on their minds, while other men would have left it unnoticed. Sir Isaac Newton saw an apple fall to the ground, as multitudes have seen apples fall; but the fact impressed itself on his mind and led him to evolve the law of gravitation, with its ceaseless influence over the world of matter. Watt made his first successful steam-engine through watching the steam issuing from a kettle, and one of

the greatest improvements in the early steam-engine was discovered by a lazy but observant boy, who was set to pull a string to actuate a lever, and found the work was just as well accomplished by tying the string to another lever, so that he was left free to go off and play marbles. These and similar examples, which might be indefinitely multiplied, are illustrations of that observation which usually distinguishes successful people.

Observation is usually and most appropriately associated with seeing. We speak of a clever man as one "with all his eyes about him" or "who goes about the world with his eyes open," and we have heard it remarked of a man that "he keeps his eyes peeled." But it wants something more than mere seeing to be observant—the vision must be mental as well as physical. The divine proverb says, "The wise man's eyes are in his head," and we know what that means. There are many men who act as though their eyes were in their feet or their elbows—anywhere, in fact, but where they ought to be. A Russian proverb says, "He goes through the forest and sees no firewood." The mind must see as well as the eye, and the wise man employs not his vision alone, but all his powers, so as to make the most of life. A fool can behold an object, but that is all. The act does not make him wiser or better; he is a fool still and continues foolish among scenes that ought to lift him to a nobler manhood.

It may be urged that the faculty of observation is a natural gift, and so no doubt it is; but if it is not born in a man, or if it be small and feeble in him, it can be cultivated as other weak powers are cultivated; and it has been well said that the habit of sharp, discriminating observation may be established by perseverance, as other good habits become permanent. Thousands of men go through the world without learning, or even trying to learn, how some men succeed and why others fail. They ascribe success to "luck" and failure to unavoidable "misfortune." Others, a little wiser, set it down to lack of education; but this alone is not the cause, for there are many instances of men of the most meagre education who have risen to high positions and even world-wide fame. Lord Bacon said: "Studies teach not their own use, but there is a wisdom without them, and above them, won by observation."

In the workshops of to-day we want young men who will ask themselves why the wheels go round, why one wheel goes faster or slower than another, why one way of doing a thing is better than another, and why the act of doing one thing brings about a certain result; young men, in fact, who can see that there are always more ways than one of doing a thing, and can decide which way is best; also reflecting that if another way could be discovered it would be better still.

We often hear it discussed what technical schools ought to teach. The answer is simple. Teach resourcefulness and observation, and how to attain their accomplishments.

When young men step out into the world to shift for themselves the value of observation soon makes itself felt, and only those really succeed who know how to observe the tendencies of acts, who can read and value character properly, who discern the signs of the times, are equal to emergencies and can husband resources, who know how to do the right thing at the right time and in the right place. These qualities only come of cultivating the faculty of observation. Smart men are only men of keen observation, who can take in a situation at a glance and act quickly on the impulse of the moment.—*Penrose's Process Work.*

---

There has been no greater advance in photography during the last ten years than the advance in *esprit de corps*. The photographer is loyal to the fraternity and proud of his profession. He does not feel that he is in a trade by chance, but in a work by choice. It is this pride in any work which elevates it, and in our profession it is the factor which has raised the whole status of photography and placed many men in positions of dignity and wealth.

If you are methodical and careful in all your operations you will avoid most failures, and if disaster should come you will the more easily locate the fault.

# SUGGESTIONS ON PORTRAITURE.

BY W. E. TINDALL, R.B.A.

In the last issue of *Photography* received Mr. Tindall continues his series of excellent papers on "The Selection of a Subject," and treats particularly of portraiture. The paper is illustrated, and contains three pictorial lessons of practical value. We extract such portions as can be readily understood without the special illustrations:

When you take your friend's photograph he very often ceases to be a friend. You will be able to avoid that calamity by the exercise of a little knowledge of the proper pose and lighting for each sitter. It will be readily understood that almost every sitter requires different treatment, both of lighting and of posing. To treat all sitters in a similar manner must result in failure, because each has some particular character which requires either bringing out or keeping subordinate.

Of course, you may say that a photograph of any person *must* be correct. It may be, and probably is, in outline, but there is something more than outline in a portrait. There is the man or woman and the expression, in addition to the simple drawing.

There may be a person whom you know who may have some pose more suitable than any other to his particular style of face.

Now, all people have a best pose, and it is the duty of the portrait photographer to find that out. We are told that a photograph cannot lie. Perhaps not, with respect to outline, but in tone value it is very often far from the truth. It is in this respect wherein lies the great value of suitable lighting.

It is possible to render tone values with considerable truth when one is in possession of knowledge of the actinic values of the different colors.

Supposing, now, you wish to take your friend and his wife, let us say. He may have plenty of color and his wife may be pale. If these two are taken on one plate and with the same form of lighting they will be out of tone. If you give the lady the benefit of the light side of the picture the effect will be made worse. In a case of this description a good deal can be done to assist tone value by having the colored person in the stronger light and the pale one (by judicious screening of light) in half-tone. By this means the exposure would be more correct on each figure. Perhaps you require them on separate plates. In this case the same principle applies. A fair sitter should never be taken in a strong light. The results of doing so are those bleached, washed-out looking portraits one often sees. In addition to this, a strong light gives nasty black shadows, which force out the modelling in an unpleasant manner.

The question of background enters largely into the success of portraits. The fair sitter should have a lighter background than the dark sitter, to reduce the cut-out appearance.

For successful portraits it is often necessary to have reflectors for the shadow side of the face, or they will be black and unpleasant. A reflector on the floor will reduce the dark shadows under the chin and nose. A sheet of white paper on cardboard makes a good reflector, and there is no difficulty to the ingenious photographer in arranging it at the proper angle.

The posing must be arranged to suit the different types of face. For instance, a very stout person would not look his or her best in profile, nor is a full view very good in such cases. I think the best way out of the difficulty with stout people is to have them sitting, and leave as much of them out of the picture as possible, having the face about seven-eighths full. A person with a hooked nose is better full, as it destroys the outline of the nose, but it is no less a portrait. Fair people are very difficult to take looking at the camera, as it is almost impossible to give the relative strength to the eyes. All photographers know dark people are their best friends in a photographic sense, as the results are more satisfactory. This is simply because there is better definition, and usually more character in the face. The hands are often a difficult problem to master. If they *must* be in the picture make it a principle to keep them as far away from the camera as

you conveniently can. A painter has an advantage over the photographer in this respect, insomuch that he generally makes the hands smaller than the camera would give them if placed in a prominent position. Those workers who do not possess a studio I should advise to take their portraits in the open air, as the light (out of the sun) is more diffused, and does not give such black shadows as a concentrated light of an ordinary room. By the use of a background and the open air a studio effect can always be obtained. Do not place the sitter too near the background; five feet is quite near enough in most cases.

While the first object of the portrait photographer is to obtain a likeness, there are others of almost equal importance, viz., making them into pictures. The fact that they are pictures does not in any way destroy the likeness, but adds greatly to their charm.

## CHIPS FROM A PHOTOGRAPHIC WORKSHOP.

The objectionable grain so often obtained in copying or enlarging a print is due to shadows caused by light falling obliquely on the print more than to any one cause. It may be got rid of by care in lighting and also by giving a sufficiency of exposure. In fact, a slight over-exposure and carefully controlled development is often the most satisfactory procedure.

An old, old dodge to secure soft prints is to half-print the picture with the paper in direct contact with the negative and then to interpose a very thin sheet of celluloid or talc before completing printing. The slight diffusion superimposed on the half-printed sharp picture has a very taking effect in some subjects. The dodge is so old that some may have forgotten it. It is worth a trial.

The flat results obtained on damp platinotype paper will be largely avoided if a few drops of potassium hypochlorite are added to the developers. It should not be used except for paper known to be damp.

We often are inclined to poor negative making and excuse ourselves because some printing processes suppress detail; but a perfect negative is good for *all* papers and unsuitable for none.

Remember that if your chemicals are O K they will possess no soul. They can be neither mean nor stupid, and if properly handled will work correctly with a blind certainty.

In 1867 Steinheil introduced a new lens and announced that "it admitted twenty-five times as much light as the lens he last brought out." If only one of our lens makers could now make (and substantiate) such a statement! But we have travelled too far on the road to perfection for that.

The artistic photographer vexes his soul over the blindness of the world in general and his customers in particular; but if he is a business man he will pity their ignorance and by tact and diplomacy meet their approval.

If an accessory is never used it is rubbish; whatever its first cost it should be got rid of at any price. Accumulations in the dark-room and in the store cupboard are an abomination. Be a man and have a merciless "spring cleaning."

Remember that a well-ventilated dark-room means health; and that safety lies not in a miserable apology for light, but in a plentiful supply of a perfectly safe one.

The ease of photography leads us to forget its extreme delicacy. We ought to be as careful to obtain the perfect print as to obtain the perfect negative.

The best materials are the cheapest, and the time spent in keeping apparatus clean is time well spent.

"Good enough" is all right in farming, all wrong in photography.

Cab.

PORTRAIT

By W. E. Buehler, Philadelphia

Cab.

PORTRAIT

By W. E. Buehler

Cab.

THE CIGARETTE

By Henry H. Pierce, Providence, R. I.

A WINDOW PORTRAIT 3 x 5¾

By Henry H. Pierce

A WINDOW PORTRAIT 3 x 5¼

By W. E. Buehler, Philadelphia

3 x 6½

PORTRAIT

By Evan D. Evans, Ithaca, N. Y.

10 x 13¼

MEDAL PICTURE IN THE LANDSCAPE CLASS
Milwaukee Convention, 1900
By Horace C. Myers, Boise, Idaho

10½ x 13¼

BY THE LIGHT OF THE MOON

Copyright, 1900, by L. V. Kupper, Edinboro, Pa.

## OUR PICTURES.

THE charm of variety and freshness is again a marked feature of the illustrations of the MAGAZINE. In this way, although all the photographs reproduced may not

W. E. BUEHLER, 1900.

belong to the masterpiece class, the practical photographer is assured of a glimpse of what his fellow-craftsmen are doing, the new styles they affect, and how their ideas look when carried into execution.

The desire to get away from conventionalism in professional portraiture has led many photographers to attempt the effects recognized as belonging to home portraiture. The window portraits belong to this class. In America we believe the style was first successfully brought forward by Mr. Henry H. Pierce, of Providence, one of whose window portraits we reproduce in this issue. The example by Mr. W. E. Buehler, of Philadelphia, and the frontispiece reproduced from another example by Mr. William Gill, an English photographer, afford an opportunity for comparison, with many profitable suggestions.

Mr. Gill's studio, illustrated in the article on "Studio Construction," in *Mosaics*, 1901, is specially adapted to this style of work, having two windows so placed and arranged as to lend themselves happily to a variety of effects. The original print sent by Mr. Gill, by the way, is a carbon in warm brown, which is hardly fairly represented in our frontispiece despite particular care in reproduction and printing.

The two portraits sent by Mr. W. E. Buehler are not only interesting as good examples of his work, but also as among the last photographs made before his retirement from photography to take up the study of medicine. The approximation to

*By John H. Kemp.*

the typical face of Christ in the portrait of the man is somewhat marked. Mr. Buehler has for years cleverly sustained a high reputation as a portraitist of unusual skill, and the craft will be poorer without

the inspiration of his work and activity. An "off-hand" pose of Mr. Buehler, his broad smile offsetting the grim suggestiveness of the head-rest, accompanies these notes.

The portrait of a lady, by Mr. Evan D. Evans, of Ithaca, is that referred to in an

*By Thuss Bros.*

earlier issue as advantageously presenting this "wash-drawing" effect which Mr. Evans has found to be a drawing card among his patrons. It will be seen that, at the foot of each reproduction, we have indicated the size of the original print. The original here under notice is a platinum print, mounted within a narrow oval design on a fawn-colored board. The treatment adopted gives emphasis to the lines of figure or pose, a fact which should be carefully considered in its employment.

Mr. Pierce's example of artificial-light portraiture — "The Cigarette" — speaks for itself as a clever bit of work along that line. There have been inquiries as to the method used in producing these pictures, but the oracle is silent.

The two outdoor pictures are given as suggestions of the outdoor time which is fast approaching. Mr. L. V. Kupper and Mr. Horace C. Myers are both professional workers who find pleasure and profit outdoors with the camera. We would like to see their example followed more generally. Photographers stand sadly in need of a broader outlook over the field of photographic work and its innumerable possibilities. To this end a judicious amount of outdoor work will directly contribute, and a few hours out-of-doors with the camera every week will prove a capital investment in the added power it will bring to the work done under the skylight.

The three little portraits accompanying these notes, from photographs by J. W. Ward, Connellsville, Pa.; Thuss Bros., Memphis, Tenn., and John H. Kemp, Scranton, Pa., do not call for special comment. They offer opportunity for studying the always interesting subject of lighting the sitter so as to preserve likeness

*By J. W. Ward.*

and character, from which point of view their reproduction is justified.

Several interesting pictorial features are in hand for our April number.

# THE STUDY OF THE WORK OF WELL-KNOWN ARTISTS.

BY G. LE PAN NEWSTEAD.

WE are told by the writers and lecturers on art, and more especially photographic art, to study pictures by master hands as a means to our betterment in the pictorial department of our work.

Not, I take it, that we should slavishly copy such works, which would be mere imitation flattering enough to the author of the original, but practically profitless to the copier. Originality is the soul of art. An artist is the professor of an art, and art itself is skill. But skill without originality is worthless, for however well a man may copy or imitate a work, be it picture, statue, prose, or music, he cannot be called an artist. He may exhibit exceptional skill in the copying, but his copy, lacking, as it must, originality, cannot in any sense be called a work of art. But from the study and serious contemplation of good pictures great and lasting benefits are to be derived, not alone in composition and grouping, but in general style and feeling. Take as an example two men—the one never having seen a Turner, the other having studied and thought out Turner's methods and aims—who set themselves to make a sunset picture. The follower of Turner will —following Turner's methods—probably produce a pictorially superior photograph than will the man who has never studied a master of sky rendering. On the other hand, if the studier of Turner deliberately copy, as far as possible, a picture by the master he is following, the chances will be that his companion will produce a better work—that is, a work of more merit, inasmuch as his effort will have the great advantage of being original as compared with a palpable copy.

But this is all very well, the reader will say. How are we going to study these pictures by master hands and minds? We do not all live within reach of the National Gallery; indeed, many of us not within reach of even a provincial gallery. How, then, do we get the chance of assimilating benefit from the works of the great ones? Are we not greatly handicapped in comparison with our more fortunate brother photographers?

To a certain extent, yes. But however far we may be from a picture gallery we can still study pictures, and that by one's own fireside. I do not propose turning the National Gallery into a postal club, but what I do suggest is this: Collect, not originals, but printed reproductions and photographic copies. Such a collection, while affording untold benefit from careful study, need not be at all expensive. In the present day of universal photographic reproduction in the magazines how often have we masterpieces in the world of pictorial art brought before us into our very homes. These printed copies carefully preserved will afford many a beneficial hour's amusement by going through them, examining and noting the various subjects and their mode of treatment. Against this substitute for examining the originals there is certainly something to be said—the question of tone values and of light and shade. The very best of printing processes and machines will alter these, but still it cannot alter the composition, and whereas we might be led astray by color in the original, in the reproduction we have nothing but our own monochrome.

Again, we are constantly having presented to us in magazines, illustrated papers, and catalogues reproductions of the work of well-known photographers. These in the ordinary way are looked through, laid aside, probably lost, and certainly forgotten. If kept together in collective form they will always be at hand when wanted, and added to from day to day will in time form a large collection of well-known workers. Their periodical examination cannot, I think, fail to impart to the collector great benefits, offer fresh suggestions, and infuse into him that desire to do better which is the great incentive to progress. All that is wanted to begin a collection on these lines is an album containing stiff paper leaves, well guarded between each leaf. If not so guarded the book will, when becoming full, bulge out in a most unsightly manner. A difficulty may be encountered in mounting when two reproductions are found, one on either side of a single page,

as in the 1900 catalogue of the Royal Photographic Society. It is not necessary to destroy one in mounting the other. The remedy is to cut a hole in the album page the size of the smaller, and mount over this, the under one showing through on the other side.

Such, then, is the suggestion for the study of pictures, or, rather, their reproductions, at home. To the wealthy my advice is, of course, collect originals; but to the less fortunate, collect their reproductions as the best substitute.

In either case I cannot but think and hope that the collection and study of such will have a beneficial and highly-to-be-desired effect. — *Amateur Photographer* (London).

## PHOTOGRAPHIC COPYRIGHT.*

BY GEORGE VAUX, JR.

THE subject of copyright is one as to which there is a great lack of general information. The principle involved in the law has grown up as a result of the love of fairness and justice, which is an attribute of all normal intellects.

Copyright has been defined as being the exclusive right of printing or otherwise multiplying copies of a published intellectual production, and publishing and vending the same, and the right of preventing others from doing so.

The word is usually employed as referring to the statutory right, though at the common law there was the right of an author in his original production, which is analogous. At the common law this right existed only so long as the work remained unpublished, and afforded no protection whatever after it had once been issued.

Prior to the adoption of the Constitution of the United States, in 1787, most of the States had their own enactments on this subject, as varied as are the statute laws of our several commonwealths to-day on any given subject. Among the many matters over which Congress was given jurisdiction by the Constitution was that of promoting "the progress of science and useful arts, by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries" (Art. I., Sec. 8).

This has been decided to be an exclusive provision, the State laws being all swept away; but it required a congressional enactment to give it effect, and all details of such enactment must be strictly complied with in order to obtain the benefits conferred.

It will be noticed that all protection by patent is also based upon this same constitutional provision.

The first copyright act was passed by Congress in 1790, and, especially in recent years, many changes and additions have been made. Prior to 1865 printed pictures were referred to as "prints, cuts, and engravings," and it was held that these words did not include photographs. This defect was cured by the act of March 3, 1865, which specifically made photographic prints and negatives the subject of copyright. But the question was raised, in a case in which a photograph, by Sarony, of Oscar Wilde had been pirated, whether the act of 1865 did not overstep the limits of the constitutional provision, it being urged that the maker of a photograph was neither an author nor an inventor within the meaning of the Constitution. It was urged that a photograph was the result of the operation of natural laws and not the embodiment of an intellectual conception; that, while the effect of light on a sensitive plate might have been a discovery in the production of pictures for which patents might have been obtained, the results were merely mechanical, with no place for originality, novelty, or invention. In commenting on this contention, Mr. Justice Miller, of the Supreme Court of the United States, says: "This may be true in regard to the ordinary production of a photograph, and in such case a copyright is no protection. On the question thus stated we de-

* A paper read before the Photographic Society of Philadelphia, November, 1900.

cide nothing." After referring to the fact that an application for a patent is most carefully scrutinized before the patent may be issued, while a copyright is issued as a matter of course, the court continues: "It is, therefore, made more important that when the supposed author sues for a violation of his copyright the existence of those facts of originality, of intellectual production, of thought and conception on the part of the author, should be proved than in the case of a patent right. In the case before us we think this has been done.

"The third finding of facts says in regard to the photograph in question that it is 'a useful, new, harmonious, characteristic, and graceful picture, and that the plaintiff made the same entirely from his own original mental conception, to which he gave visible form by posing the said Oscar Wilde in front of the camera, selecting and arranging the costume, draperies, and other various accessories in said photograph, arranging the subject so as to present graceful outlines, arranging and disposing of the light and shade, suggesting and evoking the desired expression, and from such disposition, arrangement, or representation, made entirely by plaintiff, he produced the picture in suit.'

"These findings, we think, show this photograph to be an original work of art, the product of plaintiff's intellectual invention, of which plaintiff is the author, and of a class of inventions for which the Constitution intended that Congress should secure to him the exclusive right to use, publish, and sell, as it has done by section 4952 of the Revised Statutes."

It would seem that anyone who had done all the court said was accomplished in this case by way of evolving mental conceptions and then giving them visible, useful, new, harmonious, characteristic, graceful, and original form, posing, arranging, disposing, suggesting, and evoking, withal, should have had something to protect him from the machinations of a grasping but perhaps not over-original rival. The words might equally well apply to some of the examples of the "new photography," which resemble nothing heretofore known to the mind of man.

It is evident from the foregoing opinion of Justice Miller that while photographs may properly be the subject of copyright it does not follow that any and all photographs are. An attempt has been made to put so broad an interpretation upon it, but the endeavor to enforce this strained construction has very properly failed, though not until numerous most exasperating suits had been brought, many of them savoring very strongly of blackmail.

Among the more recent judicial deliverances on the subject were those of about a year since, both in the United States Circuit Courts, one in Denver, Colorado, and the other in New York City. In the latter case the copyright of a photograph of an actress was held to be invalid. The former involved a broader question—that of what privileges can be obtained by copyrighting a photograph of natural scenery. The Detroit Photograph Company, the proprietor of the well-known views taken by Mr. W. H. Jackson, endeavored to restrain Frank S. Thayer, a Denver bookseller, from selling in a work called "Colorado in Color and Song," a copy of one of Jackson's colored photographs, "The Palisades and Alpine Pass."

The issue which was flatly raised was as to the propriety of allowing any photograph of natural scenery, even though colored, to becopyrighted. Judge Hallett thus summed up the law of the case: "A photograph of natural scenery is not the subject of copyright, because it is not an original conception of the artist. It is merely a skilful manipulation of the camera. Further, it is not shown that there was any originality about the coloring of the photograph in question, and it was shown by the defence that the result achieved was old and in common practice."

The distinction between this and Sarony's case is very clearly drawn.

Jackson's contentions did not bring him within the rule there laid down.

Whichever view of the Denver case may be taken, there appear to be hardships. If a man goes to great trouble and expense to organize an expedition, endures hardships and dangers for the purpose of obtaining photographs of some great natural objects, heretofore unknown, it would appear that some method ought to be provided by which he can secure protection from some

one who desires to avail himself of the labors of another without paying for them —clearly a most immoral procedure.

But, on the other hand, nature is free to all, and that the first taker of a view which everyone may duplicate should gain any proprietary right therein appears to be an equal hardship.

The correct rule is clearly shown by the foregoing cases—it is the original thought, the nascent conception, to which the right of ownership is secured by law. The actual result has but little to do with it. This is but carrying out the general principles applicable to literary production. A copy doesn't go. Originality alone is the crucial test. [The Jackson *vs.* Thayer suit is not yet finally decided.—EDITOR.]

## WHEN IS A PLATE FIXED?*

BY PRESCOTT ADAMSON.

EVERY once and a while we see appearing in our journals, among other stock articles, paragraphs on the use of two fixing baths, also stating that when a plate is immersed in hypo the silver is first changed to hyposulphite of silver and sodium, which double salt, while it is transparent, and gives to the plate a transparent instead of a white appearance, still is insoluble in water; and, further, that if the plate is taken out of the fixing bath the moment it clears it will never be free from silver, and that no amount of washing will make it safe. Also that this double salt is soluble in hypo, so it is only necessary to leave it in the fixing bath long enough to effect the solution of this salt; and then comes the proposed use of this second bath, which is used to effect this latter reaction.

The above is perfectly familiar to all readers of our photographic literature. It is copied from one magazine to another, so it is hard to escape it. In regard to the use of two baths, we would say that if the first bath is fit to use at all, then it is good for both purposes. If not strong enough to dissolve the double salt, then it is not good to use for any purpose. The use of two baths reminds us much of the man who, having two dogs, cut two holes in his barn door; a large one for the big dog and a small one for the little dog. The usual advice given for fixing is to leave the plate in the hyposulphite of soda five or ten minutes after it is cleared, but no definite statement of time seems to be known. The following experiments were therefore carried out for that purpose:

In order to have uniform results, but one kind of plate was used, which happened to be Seed's 26x, probably an average plate. The hypo solution was made with one part of the crystals in four parts water, and a transparent glass upright fixing bath was used to obtain exact time of reaction.

With four plates which had not been exposed or developed, and were put into the hypo with dry films, it took five and one-half to six and one-half minutes, an average of six minutes, at which time the plates were perfectly transparent, and each one was transferred to running water as soon as cleared. With plates that had been in the developer, or had been soaked in pure water, it took just one minute longer to clear the plate. This gives an average of seven minutes for fixing a plate sufficiently to make it transparent. Thermometer was 65°—and the temperature makes considerable difference; also the make of the plate has much to do with the time of fixing.

The following experiments were undertaken solely to find out how long it took the hyposulphite of silver and sodium to dissolve, and we must say that the results were not what would have been expected from the conventional statements:

Two plates of the four above mentioned were washed in an upright bath for ten minutes in a strong current of water, and then tested. A silver reaction was at once given, just as we would have supposed; but when the other two plates had been washed for two hours the result was *not* as we should have expected.

These latter plates, which were taken from the hypo at the moment of clearing and had simply been washed two hours,

* A Report of the Technical Committee, read before the Photographic Society of Philadelphia.

were tested for silver; one plate by the sulphide test and the other plate by removing the wet film, incinerating it, reducing in a porcelain crucible, and testing the residue for silver, one process being a check on the other. To our surprise, we found these two plates were perfectly free from silver. Then this latter experiment was repeated, giving the same result, and showing that when a plate is perfectly cleared and washed sufficiently long no silver remains in the film.

Now there is no doubt that silver and hypo will form under the right conditions a hyposulphite of silver and sodium—in fact, it forms two salts of this name, one of which is insoluble and the other is soluble. The first can be obtained by adding silver nitrate to hypo solution; the second must be obtained by removing the insoluble salt and precipitating with alcohol.

The first reaction we can see here; the latter is of no particular interest in this connection.

To illustrate the formation and reaction of these two double salts we will form and dissolve them here. In this glass we have a strong solution of hypo, sufficiently strong to readily dissolve the hyposulphite of silver and sodium as soon as formed. In another beaker we have a solution of silver nitrate, which we add to the hyposulphite of sodium. You observe a white precipitate forms, which at once dissolves. This precipitate is a soluble hyposulphite of silver and sodium, and shows clearly that it dissolves instantly and completely in the reagent that precipitated it.

We now dilute the hypo to a weak solution and add the silver again. This time you observe that the precipitate does not dissolve, but quickly turns black, owing to the formation of a sulphide.

Why did we not find silver in the films that were withdrawn from the bath at the moment of clearing? Supposing a double salt has formed, and even supposing it has not dissolved while in the fixing bath, you must still remember that the film is saturated with hypo, and that this is not removed completely for a long time while being washed, which would easily account for the silver being entirely dissolved before the plate is removed from the washing water.

But the truth of this matter is, that if a strong solution of hypo is used there is no double salt formed that is not readily soluble, but where a very weak fixing bath is used, there may be danger of the hypo not being in sufficient excess to properly dissolve the silver, and in that case an insoluble salt would form.

Finally, while we found that it was not absolutely necessary to leave the plate in hypo for a prolonged period, we did find that thorough washing was an absolute necessity, and cannot be omitted, if both silver and hypo are to be fully removed from the film.

## PRIZE LIST OF THE PENNSYLVANIA CONVENTION.

To be held at Reading, Pa., April 30th and May 1st, 2d, and 3d.

### CLASSES AND RULES.

*Special Class.* Open to professional photographers outside of the State. One picture only. No restriction as to size. Gold medal.

*Genre Class.* One picture. No restriction as to size. Subject to be chosen by the photographer and title to be appropriately inscribed on the picture. Bronze figure.

*Miniature Class.* Six pictures, not to exceed 3 inches; suitably and separately framed. First, silver cup; second, silver medal.

*Grand Prize.* Silver loving-cup. Open to resident members of P. A. of Pa. in good standing. Picture to be 5 inches or over, to be judged separately from the portrait classes, selected by the art judges.

*Class A.* Six portraits only, 9 inches or larger; must be framed. First, gold medal; second, silver medal.

*Class B.* Six portraits only, 6 inches or larger; framed close. First, silver medal; second, bronze medal.

*Rating Competition Class.* Twelve cabinets only; must be framed in one frame

without glass. To all receiving 21 points or over out of a possible 30, a bronze medal.

*Commercial Class.* Six pictures. No restriction as to size. Silver medal.

*Landscape Class.* Six pictures only, 6 inches or over. Silver medal.

*Salon.* Any picture or pictures selected by the art judges for salon honors will be designated by a blue ribbon.

RULES FOR ENTRY.

1. All competitors must be members of the Association in good standing.

2. Officers are not eligible to compete in any of the classes.

3. Exhibitors cannot enter in more than one of the Classes A or B.

4. Exhibitors in Special Class are required to accompany their exhibit with a fee of $2 to the Treasurer.

5. Exhibitors in Special Class, after having complied with the rule regulating entry fee, will thereby become honorary members of the Association.

6. All exhibits must be accompanied by a card having the name and address of the exhibitor, together with announcement of the class in which entry is made. *The name of the exhibitor must not appear on any part of his exhibit.* The card accompanying the exhibit will be numbered to correspond with the number of the exhibit, and none but the First Vice-President shall know whose exhibit is so numbered.

7. When dimensions of picture are given it applies to length or breadth in all classes.

8. Ten marks are the highest given on any one point, consequently 30 points are the highest that can be given on any one picture.

9. No manufacturer, dealer, or his representative will be allowed to do business on the convention floor unless he or they take floor space.

10. Have your box cover screwed instead of nailed, with your home address on the under side for its return. *The Association will not be responsible for its safe return if this rule is not complied with.* Enclose screw-eyes and cord.

11. Exhibits for entry and complimentary exhibits must be addressed to W. I. Goldman, Reading, Pa.

12. Carefully read the rules, that you may avoid mistakes and relieve the officers of any unnecessary correspondence.

TERMS OF MEMBERSHIP.

SECTION 1. Any resident of the State who is eligible may become a member of this Association by making application to the Treasurer, signing a copy of the Constitution and By-laws, and paying an initiation fee of $3 and one year's dues of $2 in advance.

SEC. 2. Any non-resident of the State who is eligible to honorary membership may become such by remitting an initiation fee to the amount of $2 in advance to the Treasurer of this Association. They shall not be eligible to officiate or vote at any of the meetings.

SEC. 3. Employés must pay into the treasury their annual dues, the sum of $2. No initiation fee will be required.

SEC. 4. Annual dues become payable November 1st, and must be paid prior to adjournment of first annual meeting. Any member failing to do this shall forfeit his membership and right to franchise in this Association, and can be reinstated only by the payment of all arrearages in dues.

Application for membership may be made by applying to W. I. Goldman, Reading, Pa., Treasurer, who will receipt for membership and dues.

Anyone desiring further information may address D. Rosser, President, 347 Fifth Ave., Pittsburg, Pa.

---

There is always room for improvement. The man who spends his time waiting for sitters will do so to the end of his days, but the man who steadily experiments and studies to improve himself will rise in the world: and his friends will debate whether it was luck or "a pull."

"Trifles," said the old sculptor, "make perfect: and perfection is no trifle." In careful attention to every detail we have one of the secrets of success.

If things go wrong it is easy to blame the chemicals, but more satisfactory to discover and remedy the cause.

# THE SINGLE-PRINT AND HOLLINGER'S METHOD.

BY WILLIAM E. WARD.

ONE of the most interesting—and most hopeful—of recent tendencies in photography is the custom, now proven successful in America, of attaching a special and individual value to a photographic print. This happy custom has been so long obsolete that most photographers regard it as entirely new. It was, of necessity, the rule in daguerreotype days, and it survived during the early flourishing period of the *carte-de-visite*. But the advent of too much ease in photographic working led to dozen rates and price-cutting, and for more years than we care to think of the average photographer has been a struggling man.

The revival of the single-print idea, though previously attempted, is really due to Hollinger, of New York—he was Hollinger of a small Ohio city when he elaborated his plans.

Much has been written of Hollinger and his methods; his luck has been much envied, and it is commonly supposed that he has—in Yankee parlance—struck oil. But the facts show that the man has won his position, and his undoubted pecuniary reward, not by any adventitious stroke of luck, but by sheer and solid hard work, which has been pursued not for months, but for years.

Hollinger has worked, as he is fond of recounting, behind a cheap tintype "machine." But that he was born some 800 miles inland he would, doubtless, have been a beach photographer. From tintype work he passed to silver paper, and became the despair of his brother photographers, for he boasted himself the champion cut-price man, and seemed to take an unholy delight in rendering futile any efforts to maintain prices or form a "ring." But photographing farmers and small traders is a limited business, especially when prices are chronically slaughtered and all babies taken free, and Hollinger, in planning a move, dreamed of the room which is ever at the top of the tree. He pored over the question earnestly, and he pored over it long. He had the technique of photography at his finger-ends, and he went strong for the art side. And he did not do it by "studying" the works of the leading photographers, but he went after all the paintings, and prints, and the relevant reading matter that he could lay his hands on. He, in a measure, permeated himself with this new anointing; and if he passed through the callow stage—as so few Americans are at present blatantly doing—he passed it in silence, and quietly digested and arranged his somewhat mixed learnings.

Ohio is among States what Yorkshire or Devon are among counties. It boasts itself no mean State, and "Ohio boys" are supposed to be as ubiquitous and as successful as Scotchmen. However that may be, Ohio has a very live photographers' association, and they usually have a successful annual convention and exhibition of work. About this special convention, and the "school" which it has raised, more, perhaps, anon. Many Ohio workers regularly enter the lists with their works, as they do, too, at the national convention, and in due season Hollinger exhibited his newer creations, which were promptly treated to the American equivalent of "skying." In spite of their obscure position they were discovered by F. Dundas Todd, and through the *Photo Beacon* the American photographers first knew of the Ohio man who was setting a new pace. Hollinger had been carefully planning a new campaign, and, having placed himself well on the higher branches of the tree, he determined to challenge "the centre of things," and boldly investigated Fifth Avenue, New York. His business methods were sound and such as would prove advantageous to very many photographers. For instance, his prints are invariably ready "the day after to-morrow." But it is with his camera and price methods as applied to his single-print idea that we are at present interested. The first invariable rule—all rules are invariable, for he is the most courteous and most inflexible of men—is that he and the sitter alone enter his east light studio. Fond parents and chaperones alike are consigned to waiting until the sitting is finished and the photographer satisfied. The *per capita* number of plates

used must delight the heart of the plate-maker. It is commonly said that thirteen exposures are usually made, but there is no fixed rule. Sometimes eight or ten exposures are made, sometimes thirty. The thirteen refers to developing. Hollinger tells us that he uses a dish which will hold just the unlucky number, and that he develops a dishful at once.

When sufficiently developed (and this appears to be decided by sheer experience and in a manner mysterious to the uninitiated watcher) the developer is poured off and hypo poured on. Of course, such a procedure is terribly unorthodox, but it is labor-saving and effective. The negatives as they come from the developer look wretched examples from the old pluck and detail stand-point, but they are what is required. Retouching is crude and slight. A bad pin-hole is not carefully stippled out, but is treated with a dab of color as though done with a soft fountain pen, or a few very vigorous strokes may be made on the unvarnished film with a soft pencil; and the work is done as the negative is held against the window for examination. So far there is much that is unusual, but nothing which may be termed startling. But in his method of submitting proofs and his method of making sales Hollinger shows a soundness and a breadth which might with advantage be more widely followed in the profession. "Rough prints" are unknown to Hollinger's customers. Platinotype is the printing process almost invariably used, and every print is perfectly finished and mounted on a cream paper of heavy weight (not quite stout enough to stand), measuring 13 x 10½ inches. The prints are trimmed as deemed best, and from a dozen negatives there are often no two alike.

Surrounding the print is a tint slightly darker than the rest of the mount. This tint, which is printed or washed on, not pasted down, is of home placing, and so can exactly set off the print, whatever the size may be. Each mounted print is inclosed in a portfolio of stiff card, buff-colored, and "imitation crocodile" in texture. The number of prints submitted is entirely according to the judgment of the photographer. He may make thirty negatives and submit but half-a-dozen prints. Not that he makes a great number of exposures in order to achieve a few chance successes, for Hollinger is too much a master of his work for that, but, as a general thing, a fair number of prints are submitted—no duplicates, but one finished print from each of a number of negatives. They are sent to the customer absolutely on approval. There is no compulsion to buy a single copy if the work is not appreciated. Any copy kept is charged five dollars (and five dollars is between a sovereign and a guinea in value). Duplicates cost three and a half dollars each, but this does not apply to prints from different negatives, only to second or later copies from any negative. Thus twelve finished prints might cost sixty dollars, or a dozen from one negative would cost forty-three dollars and a half, the first one being reckoned at five dollars. This is by no means a bad price for cabinet platinotypes. There is absolutely no second price. The pictures may be kept or returned. If returned they are quietly torn up and put in the waste-paper basket. But such a fate is much rarer than would be imagined.

The difficulty of selection seems insurmountable; there is something distinctive in every print that suggests its retention. There is absolutely no deception. Hollinger lets his work speak for itself, and if it does not create and hold its interest, back it can come. People of wealth send their checks; people of slender means keep more pictures than they can afford and retrench in some other direction. The giving-away question, too, is a poser. People do not care to give away a print which leaves them without that special pose, and so the duplicate feature assumes satisfactory proportions, and, of course, at fourteen and sixpence a print it pays. Hollinger is not a man in a groove. His enlargements and reproductions from old daguerreotypes, ambrotypes, faded silver prints, and other similar ancient relics are such as few men can equal. He does not sign every print that goes out, but his name is unobtrusively blind blocked into one of the lower corners. But this is the mere labor-saving device of a busy man, for he is perfectly ready to append his pencil signature to any print which leaves the studio. Mr. Hollinger has taught photographers a needed lesson in his successful step from

price-cutting to an inflexible stand for the highest price. He does not shriek artist photographer, but he does say, "If you wish my work you must pay my price; if you prefer a dozen for the price of one you are perfectly free to go elsewhere." If a thing is well done it is worth its price, and Hollinger carries this right through. His specialty is the five-dollar cabinet. For each increase in size he charges an extra five dollars, until the seventh size comes somewhere near 22 x 17, costing thirty-five dollars. A colored miniature may be had if ordered—fifteen guineas—and so the possibilities continue.

The feasibility of such a system, applied to a large commercial business, is extremely problematical. Hollinger's staff is eight—all from his native State of Ohio—and as eight fill the premises, there will be no addition. It is essentially a business founded on a personality—the most delightful of all businesses to a man of the right temperament. Others have tried the same system and with varying success. They have seen the succeeding of the plan without grasping its wherefor. It is impossible to fool the people for long, and no mediocre workman can render his work fashionable and remunerative by merely asking an exorbitant price.

Hollinger's trump card, with which he invaded New York, was the individuality and consistent high level of his work. But added to this there was a shrewd business head, trained, but not intimidated, in the hard school of adversity. Every detail was carefully planned. The very show-case—most important and most neglected of photographic accessories—had thought bestowed upon it a recounting of which would warrant a special article to itself. And no move was made until the time was ripe—a rare virtue in America, where brilliant schemes suffer a mushroom existence through a "half-baked" birth. The mere business details need not be recounted; enough that they are sound.

The single-print success has not been copied (or only very slightly) in its entirety. But it has had its influence on many workers and has done much toward more care in printing and mounting. The idea of charging for a sitting, including a limited number of prints, is a direct outcome of this method, and is a practice much in favor among those newer workers who have invaded the profession from the amateur side. Mrs. Kasebier charges ten dollars and gives two prints. Miss Ben Yusuf for the same charge makes three prints.

Among the general run of photographers in large cities a leading line, usually at a dollar, is becoming more popular. Often two or three pictures, from separate poses, carefully printed and neatly mounted, are given, and such good value is the work that one can only hope that the presumably expected repeats are numerous and remunerative. As an example by contrast, a firm just a mile from Hollinger offers four midgets for one shilling. They show good posing, careful lighting and negative-making, and careful printing and mounting. It is said that their makers are financially successful, and they deserve it.—*British Journal of Photography.*

## PROFESSIONAL PORTRAITS OF CHILDREN.

BY JOHN A. TENNANT.

PERHAPS the most obvious mistake made by professionals in their portraiture of children lies in the lack of reverence and simplicity which marks their treatment of children as subjects. The influence of environment, the effect of the strangeness of the studio and its methods upon the child, are points which rarely receive much consideration, although they exercise a real and direct influence upon the result of the sitting. The beautiful reserve of childhood, the natural sensitiveness and dignity which restrain most children from any familiarity with strangers until there has come a mutual understanding, are things which the average professional recognizes only to brush aside as undesirable. His method, as my observation has told me, is to carry the child through the sitting on a wave of excitement. There is a feverish

and noisy activity in all his dealings with the little ones from the flurry of "fixing up" both children and the studio for the event to the end of the performance under the skylight. The shake-up in the studio, the hurried rearrangement of accessories, the exaggerated funniness of the operator, the anxiety of the mother or nurse accompanying the child, and the general hubbub all combine to develop in the little sitter the very qualities which make a successful portrait the most remote of possibilities. What is the remedy? Granted for the moment that the photographer has a strong liking for children and is willing to take the pains so essential to the best results, how shall he overcome the real difficulties created by the strangeness of the place and its people, and make pictures portraying his little visitors as they are in the familiar environment of home life?

A great deal may be accomplished by taking away from the studio-methods all that emphasizes its unlikeness to home and its surroundings. Let special appointments be made for children's portraits wherever possible, and set apart a children's reception or waiting-room for their sole use. Furnish this room in a simple but attractive way with pictures of children, furniture suitable for juvenile uses, a few toys, animals, and a simple game or two to beguile the time of waiting. A large music-box, set into the wall as a fixture, will often prove itself a potent charm with timid or obstinate children. That the room should be clean, bright, and sunny, cool in summer and warm in winter, goes without saying. The aim in all this is, of course, to put the child at its ease and to overcome any feeling of constraint or shyness. The photographer should meet his little visitors in this room, and in a few minutes or after a half-hour's wooing, perhaps, become acquainted with the general characteristics of his subject before the sitting begins. Those who accompany the children should be warned, if needs be, not to discuss the sitting, or to instruct their charges concerning their behavior, or bother them with too much preparation. Everything else being favorable, the children's brief stay in such a room cannot but have a good effect on the after-work. It should, indeed, convey the impression that the photographer's studio is almost as nice a place as the familiar play-room at home.

Meanwhile, all the preparations necessary in the studio should have been completed, so that when the child comes under the skylight the place is quiet and ready for the sitting. One assistant to change the plates, or focus, may generally be retained at the camera with advantage, although this is not followed by such skilled workers as Mr. Core or Mr. Hollinger. The assistant should be well trained to play his part without attracting attention. Wherever possible *all* friends and relatives should be kept out of the studio during the sitting, but most often it will be needful (essential with young children) to permit a single helper to accompany the child.

In the general handling of children the photographer must be guided by his quick perception of the character of the child with whom he has to deal. Some children are easily excitable, and care must be taken not to rouse them overmuch; others are retiring and lacking in animation for one cause or another. These latter may be skilfully interested by the use of a little diplomacy. The photographer is usually a good judge of character, acquiring the habit unconsciously in his daily work, but he will need all his knowledge of human nature for successful work with children. Thus he should know how to tell the sick child from one that is well; the peevish, fretful, nervous child from one laboring under temporary timidity. Some children require a little "fuss" before they will be "drawn out;" with others quietness is the easiest way to win; and some are best left severely alone. A display of noise and bustle is the common blunder, and the lavish use of novelties of one sort or another may also be mentioned as requiring restraint. One thing is certain, if friends or relatives are permitted to be present at the sitting they should not be allowed to interfere with or instruct the child. In dealing with very timid or young children the mother or friend may advantageously help in any physical handling of the child—this detail being one to which many children are strangely sensitive—but her help should be given with eye and hand rather than by word of mouth. In other words, the sitting should be as far as possible a matter

between the photographer and his subject, free from outside interruption or interference.

With very young children difficulty will be experienced in getting their attention directed to any one spot for the moment needed for exposure. The best course to follow in such cases is to get the focus, put in the plate ready for exposure, and then, in absolute quietness, gently tap the floor. This will generally attract the attention of the child without alarming it or causing movement, and the opportunity for exposure is gained. With older children whose attention wanders from one thing to another without resting on any one thing long enough for our purpose, the undemonstrative recital of a childish tale will often secure the degree of repose necessary. The vivacious child, of course, can be managed by being "let into the game" and impressed with the feeling that the success of the affair rests upon him. Or we may busy our subjects with some simple occupation, picture-book, or toy, and at the desired moment get their attention for the exposure. Mr. Nast, after long experience with children under the skylight, advises the use of the singing voice as an excellent way of gaining the interest of dull or indifferent children. By this he means the photographer to sing the necessary directions instead of speaking them. This may arouse apprehensions as to the photographer's sanity in the minds of older people present, but we are told that the children enjoy the method; and the sparkle and brightness of animation are what we seek. Sometimes young children will persist in making "funny mouths," especially when the little teeth are coming. This can be overcome in part by touching the tongue with a small pinch of salt, which causes the child to close its mouth for a moment, during which the exposure should be made.

There is a common desire among mothers for a picture of baby smiling. Don't indulge it without an attempt at a second picture without the smile. A smile is pleasing at a first glance, but one wearies of it in a picture, where it cannot change. Babies have as many moods as older folk and are interesting in every mood, but the smiling baby does not wear well. Get the child interested, listening, looking for something or busy with its toes, and you will be just as gratefully remembered as if you had caught the smile.

As far as posing is concerned, the less said the better. Children from one to eight years are graceful in every move, that is, in free and spontaneous movement. From eight to fourteen years there is a little awkwardness, and simple poses will be most successful. With girls the three-quarter or full-length figure may be attempted; with boys the full figure should generally be avoided. But there are exceptions always. For my part I prefer Mr. Hollinger's method of letting the children loose in the studio, keeping them interested, and using a plate at every opportunity. This "wastes" plates, but insures variety of pose and expression, absolute spontaneity, and now and again a picture which could not be obtained by a hundred deliberate poses. In his studio Mr. Hollinger has a movable platform—which moves easily and noiselessly—and many of his most delightful pictures of children have been secured by its aid between "rides" and "talks." This method, of course, is in keeping with "home" methods. Mr. Core likes to picture his little visitors busied with some childish game or occupation, although his portraits of children are as varied as the children themselves.

Where two or three children of the same family are to be photographed together, many pleasing combinations may be had by interlocking the figures in such a way as to secure unity and yet keeping a desirable degree of separation in the figures. I have seen a clever example of this, offering a suggestion not yet made common. A group of four children—three girls and a boy—was arranged so as to display an oblique line of heads in profile, with the figures intertwined here and there by linking the arms of two of the children. The balance of the upper portion of the composition was secured by lettering the children's names in the upper left hand of the background, while the lower portion of the picture was held together by the lines and masses of the draperies.

In dealing with babies (clothed) care is needed to see that the child is not lost in a mass of white linen. It is usually a difficult thing to get a picture of a young baby

showing the whole of the face and hands or feet because of the superabundance of clothing *and* ribbons, but it can be done by patiently watching for the right moment. With babies minus any clothing we must strive for a pleasing outline, avoiding unsightly creases over the abdomen, etc. The full figure of a child without clothing is a favorite style with some mothers, but is seldom beautiful. The half-figure is generally preferable, but this is governed by circumstance.

## NEWS FROM THE CRAFT.

*Trimming Prints with Cut-out Forms.* The letter from Mr. Alex. L. Pach, in our last issue, has brought several letters from the craft, which make interesting reading. A. A. Bish, of Chippewa Falls, Wis., writes:

"I notice the article in WILSON'S in which complaint is made about metallic spots on paper, caused by using metallic cut-outs.

"Now I do all my trimming with ordinary brass, planished copper, or steel cut-outs, and had the same trouble that you speak of until I tried dusting the paper with a large camel's-hair or sable (flat) brush immediately after trimming, whereupon all trouble ceased.

"True it takes a little time to do this, but by holding the piece between the thumb and first finger and striking gently front and back once or twice you will be able to do it more rapidly.

"I much prefer this plan, dusting included, to waiting to trim after prints are washed and dried again, as I used to do. I have also tried celluloid trimmers, but the small sizes cut soon and are then spoiled."

*Mr. A. Von Essen*, of Detroit, offers the following suggestions touching the same detail. His letter was sent us from Mr. Pach: "I notice your name in connection with an article in WILSON'S for February relating to spots on prints caused by small chips of metal being cut away from the trimming forms and deposited on the prints. You say that you use brass and copper forms, but I feel confident that if you will closely examine the forms which you think are copper you will find that they are nothing but sheet-iron or steel, either copperplated or covered with a thin coating of copper bronze. The brass forms do not cause any spots, but the iron and steel ones do, and not only do they cause spots on the prints that are trimmed under them, but also on the prints trimmed under brass forms, if in any way the prints are handled together either in the store boxes or during washing, toning, and fixing. I had the same trouble in my printing-room and finally located it to the above-named cause. *Remedy*—Use only brass forms.

"Make a test with two batches of prints, one trimmed under brass forms and the other under your supposed copper forms. Have the two batches trimmed if possible in two separate rooms, so as to avoid all possibility of contamination; also be particular to store the prints before trimming, as well as after, in boxes that have not *previously* been used for *storing trimmed prints*, and use a separate set of trays for washing, toning, and fixing for each batch, well cleaned from any matter adhering to them from former operations, and I feel confident that you will convince yourself that the iron and steel forms cause the trouble."

*Mr. Geo. A. Ensign*, Defiance, O., says: "Try forms made of thin steel and have them *rounded* slightly on the inside edge, then *temper* or *case-harden* them. They will outwear a dozen brass forms and will not become uneven along the edge or break off."

*A Wrinkle which Softens Other Wrinkles.* Mr. Milton B. Punnett, the chemist of the Standard Dry Plate Co., of Lewiston, Maine, sends us the following wrinkle: "During a friendly visit to Messrs. Lamson's studio, at Portland, Me., I was shown a little wrinkle which struck me as well worth recording, for the benefit of the fraternity, in your excellent magazine. For the latter I have the kind permission of Mr. Lamson. The wrinkle in question consisted of two pasteboard diaphragms the size of the full opening of his lens.

Between these pasteboards was inserted a fine piece of lace or muslin, and then they were fastened together. Through the centre of this lace was cut a round hole of suitable size. In this case the full opening in the pasteboards was about four inches, while the opening in the lace was about three-quarters of an inch. In photographing persons with strongly marked features, for instance, an old man with a very wrinkled face, this diaphragm proved very effective, the rays passing through the opening giving the necessary sharpness, while those passing through the lace spread a uniform softness over the whole."

*Opals on Thin Metal Plates.* The veteran Jex Bardwell, lying ill at Detroit, sends the following letter, which explains itself: "On page 57 of WILSON'S for February is an article on *Opals*, an excellent and beautiful process, and on thinking over the subject I had an idea that I think is practical. I have no doubt that many of you have observed the cooking utensils that are coated with a beautiful smooth and fine white enamel. What is to hinder some manufacturer of enamel ware taking that fine thin iron plate used in making what is called tintype plate and in coating it with a smooth white enamel, and then our friend Carbutt to coat such plates with the same emulsion that is used in coating the opal plates? They would be cheaper, easy to handle in the printing-frame, could be cut to any size like a tintype, and give as good results as on an opal plate. I give the idea for what it is worth."

In our opinion the positive films made by Seed or Carbutt, or the bromide opals of the former, provide a more convenient form and are already on the market.

*Flashlight Portraiture.* "About one hundred photographers gathered in the D'Rosser studios, Pittsburg, says *The Index of Pittsburg Life*, a few nights ago to witness the demonstration of a device for making portraits by flashlight.

"It was a flashlight machine that has been brought to perfection by an Altoona photographer, Mr. H. B. Shaeffer, and which makes instantaneous photography indoors a possibility. The men who gathered to see the device operated were professional photographers of Pittsburg and western Pennsylvania, and they were enthusiastic over the novelty.

"Hitherto there have been so many difficulties to overcome in the use of the flashlight that it has been scarcely a practicable method of taking pictures, but by Mr. Shaeffer's scheme it is completely practicable.

"The device, briefly described, consists of a small closet for the flash—the fumes going out of doors by an escapement—connected pneumatically with the camera and a bulb in the operator's hand. The subject is focussed by light from electric lamps, and the modelling is modified by use of screens, as usual. When ready the operator presses the bulb in his hand; simultaneously the flash is released and the shutter snapped. The fumes escape out doors, and, excepting the flash, there is really nothing different in the arrangements from those of an ordinary sitting. The new process is said to be particularly efficient in photographing children.

"Mr. Rosser has secured the right to the invention for Pittsburg, and will soon exhibit some interesting pictures as a result of his practice with it."

*An Attractive Opening.* Mr. H. T. Morton, Birmingham, Ala., sends news of the opening of his new studio, and the affair was managed in a way which shows that the South is coming into line. The following card indicates the plan devised to attract the public. From a newspaper report we learn that the opening was completely successful, the display being visited by large numbers of townspeople who were happily surprised to see how enterprising Mr. Morton is in his business methods.

"Mr. H. T. Morton respectfully requests your presence at an art loan exhibit and reception, in his new studio, corner of Second Avenue and Nineteenth Street, Monday and Tuesday, February 4 and 5, from 10 A. M. to 5 P. M. and from 7 to 9 P. M. Choice works of art in oil and water-colors, pen and ink, china paintings, pyrography, tapestries, etc., will be on exhibition throughout the week. During and after this time he also solicits your patronage for his high-class photographic art work."

## THE PHOTOGRAPHERS' COPYRIGHT LEAGUE.

THE annual meeting of the Photographers' Copyright League was held at the Falk studio, January 31st, under the leadership of Mr. B. J. Falk, in the absence of President Stein. There was a fair attendance of photographers interested in the copyright question, among those present being Mr. Charles E. Bolles, C. C. Langill, R. F. Turnbull, E. B. Core, H. Byron, E. Goldensky, Alfred Holden, and Mr. Waldo, the League's legal adviser.

After the usual preliminaries the meeting proceeded to elect an executive committee for the ensuing year, Messrs. E. B. Core, J. S. Schneider (Columbus, O.), W. E. Livingston (Detroit, Mich.), B. J. Falk, ——— Schloss, John A. Tennant, Charles E. Bolles, R. Wilhelm (New York), with others, being selected for the committee, which thereupon retired to elect the officers for 1901–2. This they found themselves unable to accomplish, and the matter was left over.

The meeting then took up a discussion of plans for awakening the fraternity to the importance of the copyright issue and for obtaining the indorsement of the League's work by the National and State Associations. Mr. Holden, as an officer of the Pennsylvania Association, spoke of the advisability of a booklet of copyright information, and expressed his willingness to attend to placing the matter before the photographers at the forthcoming convention at Reading. Mr. Bolles related the work already accomplished at the conventions of 1900, notably by the National Association, at the Iowa and Missouri conventions, etc. Mr. Tennant spoke of the endeavor to interest the craft in copyright by articles in the photographic journals. Mr. Goldensky related his experience in handling the newspapers of his city and offered several suggestions.

The adjourned meeting was resumed on the evening of February 28th, when the Executive Committee of the League met and elected the following officers for 1901–2. *President*, Mr. B. J. Falk; *First Vice-President*, John A. Tennant; *Second Vice-President*, John S. Schneider; *Secretary and Treasurer*, Charles E. Bolles, 244 Fulton Street, Brooklyn, N. Y.

At this meeting it was definitely arranged to secure the support of at least fifty of the leading photographic publishers, to employ an assistant secretary to take charge of the active work of the League, and to lay out a systematic plan of working which will materially strengthen the League. The meeting adjourned at a late hour.

## THE IOWA CONVENTION.

THE eleventh annual convention of the Iowa Photographers' Association will be held at Des Moines, Iowa, May 14th to 16th, inclusive. The executive officers are preparing a grand educational gathering and want the support of every professional worker in the State. We print the prize list herewith, and urge our Iowa readers to write the Secretary of the Association, M. C. Edinger, Des Moines, for the "Rules of Competition" and further particulars.

The success of a convention depends upon the way in which our photographers give it their support. The Iowa Association is doing a good work, and its officers are putting much enthusiasm into their efforts. Lend them your help. Prepare an exhibit of your best work and attend the meeting. It is to be the event of the year for the profession in Iowa.

PRIZE LIST.

*Special Class.* Open to professional photographers outside of Iowa. Six pictures; no restriction as to size. Gold medal for best exhibit.

*The following classes are open only to members of the P. A. of I. in good standing and residents of Iowa:*

*Highest Honor.* A certificate of honorable mention, signed by art judges, will be given to each member having a picture chosen for the salon. For the salon the judges shall select from any exhibit made at this convention only such pictures as have great merit and shall be deemed

worthy of becoming part of a permanent collection. The pictures then selected shall become the property of the Association. Not more than one picture from each exhibit shall be thus chosen.

*Prize-winners' Class.* This will consist of those who, in previous years, have won prizes in Class A, or the Sweepstakes prize, or the first prize in this, the Prize-winners' Class. Any person eligible to this class shall not compete in any other class except the competition for the Sweepstakes Loving-cup and the Miniature Class. Required: Six pictures, 13 inches or larger, or twelve pictures, cabinet or larger. Gold medal.

*Sweepstakes.* Open to any photographer in Iowa who is a member of the Association, regardless of the class in which he or she exhibits. The prize will be a valuable silver loving-cup, the same to be held by the winner one year, or until next meeting, at which time it is to be returned to the Association for competition again. Anyone being awarded this cup at three successive meetings will become owner of the same and hold it as a token of success. Required: Six pictures, 13 inches or larger, or twelve pictures, cabinet or larger.

*Class A.* Open to all winners except to those eligible to Prize-winners' Class. Required: Six pictures, 13 inches or over, or twelve pictures, cabinet or larger. First, gold medal; second, silver medal.

*Class B.* Open to members from towns of five thousand or less inhabitants. Twelve photographs, cabinet or larger. First, gold medal; second, silver medal; third, bronze medal.

*Class C.* Open to members from towns of two thousand five hundred or less inhabitants. Twelve photographs, cabinet or larger. First, gold medal; second, silver medal; third, bronze medal.

*Class D.* Open to members from towns of one thousand five hundred or less inhabitants. Twelve photographs, cabinet or larger. First, gold medal; second, silver medal; third, bronze medal.

*Miniature Class.* Open to all. Required: Twelve pictures, 4 inches or under, to be framed under glass, either separately or collectively. First, gold medal; second, silver medal; third, bronze medal.

Mr. Edinger will be glad to supply further information.

## THE AGFA-INTENSIFIER.

A REPORT BY CHARLES H. BOTHAMLEY.

THE Afga-intensifier is a colorless, odorless liquid, which, before use, is diluted with water in the proportion of 1 part of the intensifier to 9 parts of water (*e. g.*, 5 c.c. of intensifier and 9 fluidrachms of water).

The undiluted intensifier remains unchanged after many months, and apparently would retain its properties indefinitely in a well-corked bottle.

When a negative, previously well washed to remove all traces of hyposulphite (thiosulphate), is immersed in the diluted intensifier it gradually gains in opacity without being stained in any way if the washing after fixing has been done with reasonable care. The intensifier image has a dark brown color and considerable printing density. The intensification proceeds gradually and can be readily washed. The maximum intensification obtainable is reached in from twelve to fifteen minutes at the ordinary temperature, and the negative should then be removed and well washed with water. No further treatment is necessary and the material composing the intensified image seems to be of a very stable character; it shows no signs of fading even after several days' exposure to direct sunlight, but, on the contrary, increases slightly in opacity.

It will be seen that the process is very simple, only one operation being necessary. The intensification obtained is greater than with mercuric chloride or mercuric bromide; and if, on the other hand, it is not so great as that obtained by the mercuric bromide and silver cyanide method, the afga process has the advantage of being much simpler, while it gives sufficient intensification for all ordinary cases.

The afga process is also superior to the mercuric chloride and ammonia pro-

cess in the greater permanence of the intensified image.

If negatives are left in the intensifier after the maximum effect has been produced the opacity begins to diminish, and the image, when viewed by reflected light, has a bleached appearance. Should this happen it is only necessary to wash the negative thoroughly with water and then treat it with an ordinary developer, when a strongly intensified image of a black color is obtained.

The Afga-intensifier can be applied to lantern-slides with very satisfactory results. The brown color of the intensified image is very suitable to most subjects and the deposit is not likely to fade.

In conclusion, my experiments have led me to the opinion that the Afga-intensifier affords a means of intensifying gelatino-bromide negatives and lantern-slides which is not only effective but also very simple and convenient.

## THOUGHTS CRITICAL AND ARTISTIC.

From a Review of *Mosaics, 1901*, by MENZIES CUMMING, Editor of *The Southwestern Photographer*.

SOME one has said—and it makes but little difference who said it, so that it was said—"Let me write the ballads of a people and I care not who make their laws." This is so surcharged with the truth of history that a substitute for it will never be needed, yet in this, the dawning of a new century, it may well find its second self in "Let me paint the pictures of a people and I care not who write their books." Like the other, this also is surcharged with the truth of history, but as applied to the individual. Volumes have been written upon the characteristics of the individual, and thousands of pounds of printer's ink have been used to tell a tithe of the character of an individual that can be told by a single glance at a well-defined and natural picture. Thanks to "light painting," this is an accomplished fact.

These thoughts came to birth in looking through Wilson's *Mosaics* for 1901. In that splendid little volume we find an example of characteristic portraiture of the individual that a thousand pages of biography would fail to portray, no matter the brain that was behind the facile pen, and Hollinger was the man who made it. Now who is Hollinger? and where is the one who has not heard of him? Hollinger makes faces as they are, not as society wants them to be. Hollinger takes nature as she is and lets her alone at that, for Hollinger is the man who retouched 120 negatives in less than half of 120 minutes; and Hollinger gets (because he asks it) $10 for one picture. With this introduction to him—if you have not yet heard of him—turn just beyond page 12 of *Mosaics, 1901*, and become acquainted with Hollinger as an artist. Study the pose, the lines, the expression, not alone of the face, but of the hands, for there is as much character in them, naturally disposed, as there is in the face of any subject. Don't fuss about the wrinkles in pants and vest, nor of the waywardness of coat lapel. These are not blemishes by any means, although you (and society) may so consider them until you know better. Consider the lighting and how it is used to bring out the character of the man, with the abandon of style in the disposition of the hands and lower limbs, all of which is so surcharged with action that you can, in imagination, hear the subject breathe. You can readily see why Hollinger can retouch his negatives so rapidly and why he can as readily get what he asks for his prints from them. Hollinger lets nature alone. This is his secret, and if you are a thinker and a painstaker you will do that very thing yourself. Face-faking with a pencil, as it has been and as in too many hands is now practised, has given birth to the insane demands of society, high or low, for marble-cut pictures so devoid of life, sentiment, or passion that the sitters' own mothers would not know them. It is time to halt, and we are glad to know that such men as Hollinger have initiated the reformation that will yet raise light painting to its legitimate plane in the temple of art.

Now do not for a moment think that we look upon Hollinger as perfection in the art photographic. Far from it. Good as is the one we have been criticising, it has a grievous fault; and if you fail to find it for a time, if you are of the right stuff you will find it and see it as we see it; so hunt for it.

After having mastered all the good that is in it your eyes will be better able to find it.

* * * * * * * *

There are many other examples in *Mosaics* for 1901, but our space prevents us speaking of them at present. Some are worthy of praise, some of censure, and others of both combined. They are all good studies for the profession.

## WATER.

As a general rule (says A. Mackie, in *Photo Scraps*), water which is fit for drinking is pure enough for most photographic purposes; but it may be taken as a fact that natural water always contains other matter in solution or suspension. What the extraneous matter may consist of depends, of course, upon the source of the supply and the nature of the soil over which it flows before it enters the pipes; thus in water drawn from the chalky subsoil of Kent the principal impurity consists of carbonate of lime in solution. In many parts of the Midlands iron compounds are frequently found, and in some parts of Cornwall arsenic occurs in appreciable quantity.

It is, of course, impossible in the limited space available here to refer even in the briefest manner to all the natural impurities to be found in water; but there are three—air, carbonic acid, and carbonate of lime—which deserve the attention of every photographer, because they are almost universally found in water available for photographic purposes; because their presence, though not creating any serious difficulties, is certainly undesirable; and because they can be eliminated in so very simple a way.

The first mentioned—atmospheric air—is slightly soluble in water, and it is obvious that to use water impregnated with air to dissolve any substance which has a great affinity for oxygen is not a scientific proceeding. Pyrogallic acid and sulphite of soda are both such substances. If a bottle were half filled with a solution of pyro made with ordinary water the solution would become discolored throughout in a very few hours. A solution kept under similar circumstances, but made up with water free from air, would remain colorless for days, and the action of the air could be plainly followed; a film of discoloration, caused by oxidation of the pyro from contact with the air, first forming at the top and in course of time gradually proceeding downward. In a solution of sulphite of soda a similar action takes place. By contact with air a portion of the sulphite becomes oxidized to sulphate. It is the greedy absorption of oxygen by sulphite of soda that constitutes its value in a developer. It seizes any free oxygen present, or most of it, forming an inert substance—sulphate of soda—before it can attack other but less oxidizable substances present at the same time, such as pyro, metol, and hydroquinone.

Carbon dioxide or carbonic-acid gas is freely soluble in water, and it is in consequence of the presence of this gas that water is impregnated with carbonate of lime, or is what is termed hard. Carbonate of lime is not soluble in pure water, but it is soluble in an aqueous solution of carbonic acid. Hence it follows that by eliminating the free carbonic acid from the water the carbonate of lime will be precipitated. This is how it is that solutions of any of the alkaline salts such as the carbonates of potassium, soda, or ammonia, or of the caustic alkalies made with tap water, always become turbid shortly after mixing. The alkali combines with the carbonic acid, leaving the water free from it and no longer capable of dissolving carbonate of lime; the carbonate of lime therefore returns to the solid state.

Both air and carbonic-acid gas are expelled from water by boiling, and incidentally the carbonate of lime is also removed

in the way explained above, as evidenced by the furring of tea-kettles and boilers. By a very simple operation, therefore, water free from certain impurities may be obtained in sufficient quantity for such purposes as making solutions. The carbonate of lime is, of course, permanently removed, but it is very easy to conceive that air may be reintroduced even unintentionally. A bottle partly full of water perfectly free from air is not likely to remain so after a violent shaking, so this method of mixing a solution should naturally be avoided as far as possible if freedom from air is desirable. In practice it is not always possible to adopt the best theoretical course, it is true; but the best practical course is to follow the best theoretical course as nearly as circumstances will permit. It is both easy in practice and correct in theory to use water boiled and cooled for making solutions in preference to ordinary tap water.

# EDITOR'S TABLE.

OBITUARIES. We regret to announce the death of Mr. JOHN W. WILLARD, which took place at Chester, Conn., January 26th last. Mr. WILLARD engaged in the photographic supply business in 1856, and was the founder of the well-known firm of the WILLARD MANUFACTURING CO., at one time the largest concern of its sort in this country. In 1882 Mr. WILLARD relinquished his interest in the firm to take charge of a department of the SCOVILL & ADAMS CO., which he left in 1897 to take up the editorial management of *Snap Shots*. Mr. WILLARD was one of the veterans of the trade, by whom he was highly esteemed as a gentleman of the old school, courteous and genial in his dealings, with little in his composition of the somewhat harsh cut-and-dried methods now so prevalent in the trade.

The death is also announced of Mr. L. B. KLINE, of Huntingdon, Pa., at the comparatively early age of fifty-seven years. Mr. KLINE entered photography as a profession over thirty years ago, and enjoyed a high reputation in his town and locality as a man of sound integrity and of progressive ideas.

---

FORTY years old, and extremely fat, the *British Journal Almanac* for 1901 comes to the editor's desk. More than fifteen hundred pages, two-thirds of them filled with most interesting and tantalizing advertisements, surely give enough, both of bulk and value, for the modest price of half-a-dollar (or cloth, gilt lettered, 75 cents). The principal article, by the editor, F. R. P. S., deals with "Exposure Tables and Exposure Meters," a subject which has long needed dealing with, and which is now handled in so acceptable a manner, so far as it goes, that we cannot but wish it had expanded beyond its limit of thirty pages. The other contributed articles number some ninety, and we have the same pages of formulæ, of almanac (with its quaint bits of dated information), of pictorial advertisement inserts, the same bromide frontispiece, and the other features which are as essential a part of the *Journal Almanac* as the Pilgrim Fathers are an essential part of American history. The *Journal Almanac* occupies a niche all its own in British journalism, taking as far as it can the position held by *Mosaics* in this country. May its shadow never grow less nor its corpulency greater. The whole volume reflects great credit on Mr. BEDDING, F.R.P.S., and may be obtained in this country from G. GENNERT, New York.

---

PRINTING ON IVORY. The following formula will be of use to those who wish for advice on this subject. It is one which, CARL DROSKY says in *Photography*, he has long used successfully for the preparation of a photographic basis on ivory for miniature printing:

| | |
|---|---|
| Water (distilled) . . . | 10 parts. |
| Silver Nitrate . . . . | 3 " |
| Uranium Nitrate . . . | 30 " |
| Absolute Alcohol . . . | 100 " |

This solution is made up and applied to the ivory with a soft brush. The sensitized surface so prepared is then dried in the dark, and afterward printed by contact in daylight. The printed picture is fixed by merely immersing it in water acidulated with nitric acid; it is then rinsed in clean water and dried.

It is most essential that the surface of the ivory be absolutely clean; the least trace of grease or moisture will cause patchy prints.

---

A. C. HARMSWORTH, one of the brilliant young men who has set a new and somewhat yellow pace to British journalism, says that, generally speaking, he is against illustrated newspapers because the illustrations are unrecognizable. It would be cruel to suggest that a Londoner could be a provincial, though his opinions would lead to such a thought, for surely he is either ignorant of or misunderstands the American paper. In a recent issue of the *New York Tribune* Mr. HARMSWORTH makes a qualified retraction, and

this retraction is emphasized by a portrait of himself in half-tone, beautifully printed, though with a rapid press and on the common paper of a great daily.

---

THE LOVELL DRY PLATE MANUFACTURING CO., New Rochelle, N. Y., inform us that they are growing very rapidly—that their February business will be close to three times that of February, 1900. We are pleased to hear this—a proof again that good plates will find good patrons.

---

A BIRTHDAY party was given to our veteran friend, L. T. SPARHAWK, Randolph, Vt., on February 11th, the occasion of his seventieth birthday. His children gathered about him and a number of friends sent letters of cheer and congratulation, which all made the occasion a happy one.

---

A MODEL catalogue of selected photographic books of all countries has been sent us by Messrs. TENNANT & WARD, 289 Fourth Avenue, New York. No one knows better than we do what an amount of labor such a catalogue entails or what trouble is necessary to meet the requirements of such a book business—all in order that the craft may be supplied with the very best information the world gives. It will open your eyes to get this catalogue and study it carefully. It is free. Keep in touch with these caterers for your good.

---

THE EASTMAN KODAK CO., Rochester, N. Y., has just issued for gratuitous distribution a charming booklet on *Pocket Kodak Portraiture*, written and illustrated by Mr. RUDOLPH EICKEMEYER, JR. The little book affords many hints for the professional as well as for amateurs, and is worth getting as a good example of how to make an advertising booklet calculated to win attention.

---

AN artistic, reliable, and convenient line of pigments suitable for coloring photographs on all kinds of paper, carbon prints, lantern-slides, and transparencies has long been desired, but until now never realized. Such colors should combine the following points: Purity of color; ability to get all degrees of depth from the most delicate to the most intense; ability to get all secondary and intermediate tints by mixing the simple colors; perfect transparency and freedom from grit, precipitate, gum, or other substances which would disfigure the surface of prints on paper or injure the transparency of lantern-slides; reasonable permanency and reasonable cost, which includes *mailability*.

The ordinary water-colors are wholly unsuitable for these purposes, being earthy, dull, and opaque when applied to photographic prints and transparencies. The colors usually sold for tinting photographs are weak solutions of cheap aniline dyes or mixtures of the same with gum and glue, unsatisfactory and incapable of producing really artistic effects. A penny's-worth of dyestuffs with ten to twenty-five cents' worth of bottles, box, and labels, and requiring shipment to the purchaser by express, makes too expensive a lay-out at $1.50 to $5, the prices at which such sets are sold, when it is considered that even if capable of artistic employment the colors thus put up are quickly consumed and must be frequently renewed.

Mr. A. G. MARSHALL, the famous art school director, critic, portrait and landscape painter, and lantern-slide colorist, has been persuaded to offer his perfected *Electric Light Water Colors* to the profession. Heretofore their sale has been restricted to his pupils. These colors are the result of years of experiment with hundreds of coloring materials and chemicals. They seem to be as near perfection for their purposes as could be made, and fulfil all the requirements of high-art colors. The value is in the paints and not in the package, and being in dry form (ready for instant solution in water), they can be sent anywhere by mail. They are perfectly manageable for tinting photographic prints, and for lantern-slides the beautiful hues are projected to the screen perfectly with the electric, calcium, acetylene, Welsbach incandescent, or kerosene light.

With these colors Mr. MARSHALL produced the marvellous effects which have excited the applause of thousands of audiences who have been delighted by Alexander Black's brilliant "Picture Plays," Lieut. Peary's wonderful "Arctic Scenes," C. D. Kellogg's gorgeous "Bird Carnival," Stoddard's magnificent tours, and hundreds of other popular entertainments. We feel assured that the *Electric Light Colors* will meet a deserved welcome and prove a most useful adjunct to the equipment of both the professional and amateur.

---

ROTOGRAPH PAPER, in the short time it has been on the market, has received very favorable comment from professional photographers everywhere. It is a high-grade bromide paper, coated upon the best stock obtainable, and yielding results, with proper treatment, that are very close to a platinum print. It is suitable for either contact work or enlargements, is usually exposed by artificial light, and developed in the dark-room in precisely the same manner as a dry plate or film. Although the rule with the paper is "short exposure and long development," it really possesses a great latitude of exposure, so that satisfactory results become an easy matter, while there is a minimum of spoiled prints. We would advise our readers to send for a sample package of the paper.

---

A NEW USE FOR THE RAY-FILTER.—Mr. S. C. WORKMAN, of Torrington, Conn., writes under date of February 18th as follows: "I found the bichromate ray-filter a great convenience in a way that I have

never seen mentioned heretofore. In making bromide enlargements I use it as a cap for the lens. After focussing on the easel I cap the lens with the filter and proceed to adjust the bromide paper in position. The light passing through the filter allows one to see exactly where to place the paper, and yet does not affect the sensitive surface at all."

This action of the ray-filter will, of course, be perfectly understood when it is remembered that bromide and similar papers are sensitive only to a very small portion of the upper end of the spectrum. This is why they can be handled so freely in yellow light. The ray-filter strains out all the rays except those below the yellow-green of the spectrum, thus giving a perfectly safe light by which the image on the bromide paper can be examined and the picture adjusted on the sheet as desired. When the exposure is to be made the ray-filter can be removed from the lens the same as an ordinary cap and again replaced when exposure is convenient.

---

MR. G. GENNERT, 24 East 13th Street, New York, has just introduced a fibre fixing box which will commend itself to the practical worker. It is constructed of an unusually tough material, similar to that used in making the well-known *Duranoid* trays, and is grooved to hold 5 x 7 plates. The box can also be used for stand development with diluted developer, and, at the normal price put upon it, will undoubtedly find many buyers.

---

THE January number of this MAGAZINE is completely out of print and very few copies remain of the February issue, notwithstanding an increase in the monthly edition since the beginning of the year. We will gladly pay full price for clean, perfect copies of the January issue returned to our office, in order to accommodate new subscribers needing them.

---

EDWARD COPE. According to an announcement recently received, Mr. HENRY H. COLLINS, JR., and Mr. EDWARD COPE, long connected with the A. M. COLLINS MANUFACTURING CO., Philadelphia, have resigned their offices of Vice-President and Secretary-Treasurer, these offices being now filled by the election of Mr. ALFRED M. COLLINS as Vice-President and Mr. HENRY H. COLLINS, JR., as Secretary-Treasurer.

Mr. COPE passed fifty years in the service of the A. M. COLLINS CO., in whose success he naturally had a large share. He has secured the highest esteem of the fraternity as a man of strict integrity and a persistent worker whose endeavor has always been for the good of the craft. As an old subscriber and supporter of this MAGAZINE we join with our contemporaries in wishing him many happy years of well-earned leisure.

MOSAICS, 1901. Out of some hundreds of letters received in praise of *Mosaics*, 1901, the two following may be taken as fairly representing the reception given to the book:

"*Mosaics* for 1901 is one of the handsomest year-books I have seen, and the reproductions which it contains are of a very high quality. I most heartily thank you for it."—C. C. KOUGH, Greensburg, Pa.

"MY DEAR MR. WILSON: I received *Mosaics*, and think it the best of all. I thank you very much. It is full of valuable information, good examples of photography, and skilfully executed engravings."—F. M. SOMERS, Cincinnati.

---

COLOR DIFFERENTIATING. The subjoined letter from Mr. W. A. COOPER, one of the most expert photographers in this country, will interest those who have heard of the color sensitive plate introduced by the LOVELL DRY-PLATE MANUFACTURING CO.:

"DEAR MR. LOVELL: I am delighted with your Color Differentiating Plates. They possess qualities I have not seen in other plates, especially in the dark reds. The name you give to your make covers what I wished to express. They do 'differentiate'—that is, from where the deep reds and greens are together. It is the first plate I have used that gives me the different shades of red as I want them."—W. A. COOPER, New York.

---

*The Photo-Mirror* is a newcomer in the field of photographic journalism, and one which deserves our good word as carefully edited and beautifully printed. It is published by Mr. H. A. HYATT, of St. Louis, and edited by his son, Mr. HARRY H. HYATT. *The Photo-Mirror* for January contains announcements of several new specialties introduced by Mr. HYATT; and we note that our old friend has purchased the photographic stock of the MEYER BROS. DRUG CO., of St. Louis, and also the photo supply business of Mr. C. KORTWRIGHT. These purchases, with the large stock Mr. HYATT usually carries, will place him ahead of all Western competitors in completeness of equipment and facilities.

---

THE new Sulphite and Carbonate of Soda, C. P., introduced by the M. A. SEED DRY-PLATE CO., are winning golden opinions from the fraternity. From among many eloquent testimonials shown us we extract the two following as representative of the general opinion of those who have used the new sodas:

"WALDORF-ASTORIA, NEW YORK, Jan. 2, 1901.

"M. A. SEED DRY-PLATE CO.,

"*Gentlemen:* Your new Seed's Sulphite of Soda and Carbonate of Soda have given fine satisfaction in my dark-room; the former especially is better than any I have ever used before. Very truly, FALK."

"NEW YORK, Dec. 24, 1900.

"*Gentlemen:* I have tried your C. P. Carbonate and Sulphite of Sodium in combination with dear old Pyro, and find that they produce negatives with excellent printing qualities, very brilliant and full of details. I will use them exclusively hereafter. Respectfully yours, *J. Tejeda*, Operator for KURTZ."

---

MR. H. SNOWDEN WARD, who has for many years made special efforts to foster the efforts between photographers and the illustrated press to their mutual advantage, has associated himself with the Illustrated Press Bureau, Ltd., 10 Norfolk Street, Strand, London. This agency offers the following advantages to those who have subjects suitable for reproduction in periodicals, books, or newspapers: 1. An office in London, where prints may be stored, carefully arranged, and edited. 2. Prompt service in offering to editors any subject in stock which may become interesting. 3. Submission to every likely editor in London of any subject of immediate importance directly on receipt. 4. Prompt payment on acceptance by an editor. 5. Connections on the Continent and in the United States. 6. Assistance in registering copyrights and advice on copyright matters. 7. Appointment of local special press photographers, who will receive commissions for special work.

American photographic publishers interested in this agency and its work are invited to send for the circulars issued by the Bureau, and to inform themselves generally as to the scope of its work and purpose. The enterprise, headed as it is by responsible men, seems to offer promise of great usefulness, and we commend it to the attention of our readers.

---

THE HAMMER PLATE, a long-time favorite, seems to be putting on speed and winning new popularity at the same time. The last batch exposed was, to our mind, as speedy as we care to handle, and we overtimed two-thirds of the contents of our holders. Quite in keeping with this improvement in speed is a letter received from the manufacturers which says: "The demand for our Extra Rapid Plate grows all the time. We are putting out almost the full capacity of our factory, and the emulsions run with splendid uniformity."

---

IT is a pleasure to us to see that, in the large book business built up by our agents, Messrs. TENNANT & WARD, 289 Fourth Avenue, New York, our own publications—*Quarter Century in Photography*, *Photographics*, *Cyclopædic Photography*, and *Wilkinson's Photo-Engraving*—are in constant demand. The sales of these popular hand-books has so increased of ate that we have been obliged to reprint and supply new stocks of all, so that all orders from the trade or for single copies are assured of prompt attention.

THE February number of *The Photo-Miniature* is an unusually interesting one and should find a place in every professional dark-room. It is devoted to photographic manipulation, and deals with the making up of solutions, formulæ, etc., weighing and measuring, and the washing of negatives and prints.

---

*Ins and Outs of Buffalo* is a useful little book fully illustrated and neatly bound, published by A. B. FLOYD, Buffalo, N. Y. It aims to present a brief description, reliable and up to date, of the Exposition city as it is to-day, and accomplishes its purpose in a very satisfactory way.

---

MR. RUDOLPH GOEBEL, of St. Joseph, Mo., recently celebrated his sixty-sixth birthday with a large party of relatives and friends. Mr. GOEBEL has been a subscriber to this MAGAZINE since its first number, and doubtless his prosperity and youthfulness are in part the result of a faithful reading of these pages. May he continue to renew his youth and prosperity as the years creep on.

---

THE photographers of Illinois will hold their second annual convention at Quincy, Ill., May 28th to 30th. The Kentucky and Tennessee Association will meet at Nashville, Tenn., April 16th to 18th inclusive. Great preparations have been made for the success of these interesting events, and the photographers of the States mentioned should lend their presence and aid with the enthusiasm the cause deserves.

---

THE photographic department at the Pan-American Exposition at Buffalo this summer will be in charge of Mr. C. D. ARNOLD, who had charge of the photographic concession at the World's Fair of 1893. From now to May 1st the fee for admission to the Exposition grounds with a camera will be 25 cents. Only cameras without tripods, which will take pictures 4 x 5 inches or less, will be permitted. After May 1st the charge will be 50 cents.

---

MR. F. DUNDAS TODD has given a very practical value to his *Photo-Beacon* this year by publishing in every issue an illustrated article upon "Posing," by Mr. VANDERPOEL, of the Art Institute, Chicago. No professional photographer can afford to miss these useful papers, which touch in forcible fashion the weakest spot in professional practice.

---

WE recently made a practical test of the *Oxpo Reducer*, made by the NEW YORK PHOTOGRAPHIC CO., with gratifying success. The test negative was so dense that it required a full day's sunlight to yield a print. After a few minutes' immersion in *Oxpo* we secured a quick printing negative, showing many details previously hidden by overmuch opacity. The professional worker will be pleased with *Oxpo* after a practical trial.

MR. JEX BARDWELL, of Detroit, has been confined to his home by a severe attack of "la grippe." This visitation has left him sadly short of the wherewithal for his everyday needs. If any of our prosperous readers desire to help Mr. BARDWELL we will be glad to forward such contributions as are sent us for this purpose.

---

AN interesting pamphlet describing the Gray Double Stigmat lens has been sent us by the GRAY-LLOYD MANUFACTURING CO., Ridgewood, N. J. It should be seen by all who are about to invest in a new lens for the coming season.

---

ST. LOUIS is as active as ever photographically. The dry-plate makers are all extremely busy; STRAUSS is pushing forward to the opening of his new studio, and J. ED. RÖSCH is already at work in a new gallery at the corner of Grand and Finney Aves. Success to all.

---

*Trade News* for February, published by GATCHEL & SONS, of Louisville, Ky., was an unusually interesting number, being devoted to a running description of American photographic journals and their distinctive characteristics. The leading article consisted of an urgent appeal to photographers to read more widely and to keep themselves informed upon the progress of photography in every direction. Messrs. GATCHEL & SONS deserve considerable praise for the enterprise which evolved this special issue of *Trade News* and for the spirit of fairness which marked their review of many widely different papers.

THE WALPOLE CHEMICAL CO., Walpole, Mass., amous for chemicals of fine quality in the past, are again placing their *Walpole Hypo* before photographers. Those who know the specialties of this firm will need no urging to patronize them again, now that their goods are obtainable, but all our readers will do well to send for the firm's new circulars and price list.

---

*Aristo Eagle* is a new photographic monthly, edited by Mr. T. W. PATTISON and published by the AMERICAN ARISTOTYPE CO., Jamestown, N. Y. The first number is a daintily arranged little book, measuring 5 x 9 inches, overflowing with practical information or professional photographers, and fine illustrations. It is printed on coated paper throughout and inclosed in a green cover delightful to the eye.

---

MR. G. GENNERT, the American agent for Hauff's developers, informs us that the demand for *Pyrol* (the new and improved form of pyro) has largely grown of late, especially among professional workers. *Pyrol* has several advantages peculiar to itself, and the practical worker will do well to investigate its properties.

---

THE Photographic Salon recently held at San Francisco was remarkably successful and the attendance of the general public much larger than was anticipated by the most sanguine of its projectors. Over thirteen hundred prints were submitted, of which some six hundred or more found place on the walls.

January 10, 1901.

My Dear Wilson:-

The year book Mosaics 1901 arrived safe and in good condition, dressed in a good suit of clothes, and on the uncovering of it and examining it thoroughly, find that it has a good body, and a very good soul. I trust it will do good and bring the results you have always worked for, a greater progress, a benefit to others, a betterment of condition among the craft.

Allow me to congratulate you on having brought to the Photographic workers one of the best books that I have so far seen.

I wish you every success and its enjoyments, and believe me yours,

Alfred Holden

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of:

# The modern Developers:

—✻ **Patented.** ✻—

AGFA-INTENSIFIER.

AGFA-REDUCER.

## Imogen:

The **most powerful** developer of all.
Does not **injure** the fingers.
Strictly adapted to the **high sensitiveness** of the modern **gelatino-bromide dry plates.**

## Eikonogen:

**Working very harmoniously.**
Specially adapted for **portrait** and **instantaneous photography.**

## Diogen:

**Elastic! Powerful! Handy!**
Therefore suited for cases in which it is doubtful whether the plate has been correctly exposed.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $0.37 | 1.20 | 2.10 | 3.95 |

## Rodinal:

**a highly concentrated** developing solution for all kinds of photographic work.
Diluted with twenty to thirty times its volume of water, it is ready for use.

| 3 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $0.60 | 1.10 | 2.00 |

## Amidol:

**Needing no alkali,** can be well applied to all kinds of photographic work.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $0.75 | 2.75 | 5.25 | 10.00 |

**Pamphlet on developers, second enlarged edition, free on application.**

Sold by all Dealers.

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 532.
APRIL, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

THE VALUE OF FRATERNITY. By a Special Correspondent . . . . . 113
MR. EASTMAN'S GENEROUS GIFT TO ROCHESTER . . . . . 114
PRACTICAL NOTES ON DAYLIGHT ENLARGING . . . . . 115
SUNLIGHT EFFECTS. By E. F. Waldo . . . . . 117
THE AFTER-TREATMENT OF NEGATIVES. By E. Neville . . . . . 118
VARIOUS TONES ON PLATINUM PAPER . . . . . 120
PICTORIAL COMPOSITION IN OUTDOOR WORK. By Rev. F. C. Lambert . 120
THE LENS AND BRUSH CLUB . . . . . 129
PHOTOGRAPHY AS A PROFESSION. By Will Armstrong . . . . . 131
ESSENTIALS IN CARBON PRINTING. By J. Morrieson . . . . . 133
THE ADVENT OF NEGATIVE RETOUCHING IN AMERICA. By J. F. Ryder 134
THE STRENGTH AND USE OF SOLUTIONS. By C. Welborne Piper . . . 137
AN EXHIBITION OF HISTORICAL NEGATIVES . . . . . 139
COMMON IMPURITIES IN WATER. By a Dark-room Man . . . . . 139
THE JOURNALISTIC INSTINCT . . . . . 140
ENLARGED NEGATIVES. By Sir William Abney . . . . . 142
CLOUDS By Patrick Sagar . . . . . 143
GENRE PORTRAITURE . . . . . 145
PYRO. By Jex Bardwell . . . . . 147
ORTHOCHROMATIC PLATES . . . . . 148
OBITUARY . . . . . 149
PRACTICAL METHODS AND FORMULÆ . . . . . 151

OUR PICTURES:

"The Bride." Engraved from a Platinotype Portrait by Will Armstrong, Conly Studio, Boston. Supplement Engravings: Portraits and Work of the Lens and Brush Club of Boston

EDWARD L. WILSON,
289 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY

Fine money


# MAKE NO MISTAKE

The practical photographer who *feels* the need of inspiration in his work; who wants to *know* what his fellow-workers in the craft are doing; and who wants to *see* what the best workers are doing, must

## SUBSCRIBE FOR

# WILSON'S PHOTOGRAPHIC MAGAZINE

Plain and Practical Information on Practical Work; Helpful Papers on Interesting Topics; All the News; and a Liberal Selection of Pictures Carefully Reproduced and Printed.

*A PROGRESSIVE RECORD OF THE PROGRESS OF PHOTOGRAPHY SUCH AS CAN'T BE HAD ELSEWHERE*

## OLDEST and BEST

**Three Dollars Per Year**

**Six Months for $1.50 Current Issue, 30 Cents**

**Don't Miss a Number**

---

**EDWARD L. WILSON**

**289 Fourth Ave., New York**

PORTRAIT

By Will Armstrong, Conly Studio, Boston

# WILSON'S

# PHOTOGRAPHIC MAGAZINE

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. APRIL, 1901. No. 532.

## THE VALUE OF FRATERNITY.

BY A SPECIAL CORRESPONDENT.

THERE is a striking and characteristic difference between the tone of British and of American professional photography. The dominant note with us is, happily, one of optimism; with the Englishman it is dire pessimism. One primary cause of this difference is that of capital and of men. In Britain there are as many (possibly more) large business firms as in America; but there appear to be fewer men who start at the bottom and build for themselves a sound business founded on their individual skill. By large business firms we mean those whose work, including operating, is entirely or mostly done by employés—firms with considerable capital invested and doing a large turnover. In England success means that the business dominates the man; with us the man holds his eminence.

The British photographer has just met with a new and very real grievance—one which it is easier to appreciate than to suggest a remedy for. An enterprising firm appears to be negotiating a coupon scheme, using "national advertisers" as its mediums. Already a large firm of soap-makers and another whose specialty is cigarettes have taken up the proposition and are advertising that they will give a dozen bromide prints, 4¾ x 6½, including mounts, for sixty cents and sundry coupons cut from wrappers. A photograph from which the prints are to be made must be supplied by the customer, and he must also sign his name to several statements, with a view to protect the photographer from any possible copyright complications.

Everybody uses soap, and almost every family contains a smoker, and it is little wonder that there is wide-spread dismay among the poorer members of the fraternity. The unfortunate fact appears to be that too many of the smaller and less skilled workers are in a chronic condition of fearing bankruptcy.

The real trouble with the little man in England is that he fears his neighbor. He has not discovered, as we in America have done, that he who helps his neighbor helps himself. He thinks that if a man rises in the profession he does so at the expense of the rest; we have found that the more men there are who rise the more is the general level of the fraternity elevated.

Were the American photographer to suffer from panic his case would indeed be desperate; for there are firms who give one cent trading coupons, for which photographs are given as premiums; there are lots of firms who make a leading line of button pictures and there are those ingenious people who give away an enlargement and then sell a frame. All these we have with us; but, happily, we are not deluged with clamoring letters asking us to agitate the Senate or do some other equally wild thing. If the photographer finds his business crowded out by buttons he goes and does likewise; if he finds there is nothing but starvation in his location he borrows a buggy to move his traps and tries a change of air.

For years we have, in season and out of season (except that the suggestion can never be out of season), urged a large

spirit of fraternity on the profession; nor has it been the voice of one crying in the wilderness. Much inertia there has been, but there has also been much gratifying response. Those among us who are drifting through gray to white hairs will remember the royal times of old-time conventions. There were ups and downs, good meetings and those which were unsatisfactory. There was wide interchange of ideas and a strong spirit of freedom was cultivated, to the entire discomfiture of the process-monger. But for those old conventions we should have to-day a thousand snails dotted through the country, each turning out his own little batch of poses, trimmed to the mount which he ordered in thousand lots. Those old conventions, and their present-day successors—the national and the many State ones—have been one of the greatest, if not *the* greatest, of the many factors making for the elevation of the profession. In a couple of months from now we will be publishing "final appeals" from the various convention officers urging that everyone, whether it be convenient to him or the reverse, spend the July week in Detroit. Such appeals are so common that the man who does not go knows them by sight and instinctively ignores them.

He does so under a misapprehension. He thinks the conventioners clamor after him for their advantage; in truth, it is his own advantage which is at stake. The arguments in favor of the conventions are so obvious and incontrovertible that to repeat them would appear almost unnecessary. The arguments against them—or rather against some individual attendance—are weak and selfish. Occasionally we hear of a photographer laboring under the delusion that he may reveal some valuable secret if he appears in public. This complacency is more ostrich-like than real. If he feels his superiority keenly let him refrain from exhibiting and from speaking. To see photographs by more than one hundred fellow-workers—and many of those the more successful workers—will give some points worth knowing to anyone who is not a bat. The arguments and discussion with the producers of the pictures; the why of the lighting, the quality of the printing, etc., will all give hints to the man open to accept them. To urge attendance on the habitual conventioner is an unnecessary task, but to those who have never been to one we would strongly urge that they immediately decide to be in Detroit this year; the more especially if they have any feeling that there is a possibility of any improvement in the business returns of their studio.

## MR. EASTMAN'S GENEROUS GIFT TO ROCHESTER.

On page 199 of our last volume we announced the generous gift of Mr. George Eastman to the city of Rochester, N. Y., of a noble building to become a part of the Mechanics' Institute. Since then the structure has been erected and the opening for service has been announced in the city papers, as follows:

"Preliminary announcement of the programme for the formal opening of the new Eastman building at the Mechanics' Institute has been made by the executive committee, composed of Secretary John A. Stewart, Harold C. Kimball, Mrs. Arthur S. Hamilton, and Mrs. Emil Kuichling. The opening exercises will extend over a week, beginning April 15th and running through to the 20th, and it is planned to make the affair the most pretentious of the sort ever held in this city.

"It has been planned to use the large library at the left of the entrance as a tea-room and flower display, while the suite south of the library will be used as lunch-rooms, where lunch will be served every afternoon and evening. It is believed that the various manufacturers of foods can be persuaded to furnish supplies free for the week in order to advertise their wares, and, in fact, several local concerns have already promised to do so.

"The rooms in the rear will be devoted to country stores, where every variety of article will be on sale. The big room opposite the library, which is designed as a lecture hall, will be given over to dan-

cing, for which music will be furnished by Dossenbach's orchestra. The large gymnasium in the basement will also be devoted to dancing. In the offices to the right of the entrance the executive committee will have its headquarters, and the press bureau will also have quarters in the offices.

"The assembly room will contain a quantity of millinery articles made at the institute, and a rummage sale will be held in the recitation rooms of the north wing.

"At the head of the stairway on the second floor the Fifty-fourth Regiment Band will be stationed to give afternoon and evening concerts each day. A continuous entertainment is also to be a feature, the performance being given by local talent. The laboratory to the right, opposite the band, will be converted into a smoking-room for the week.

"In the rooms of the Spring street wing will be a display of articles manufactured by local concerns, twelve of which have already signified their willingness to make such an exhibit. Mrs. William Eastwood will be in charge of this exhibit.

"In the north wing will be found a portrait and loan exhibit, and the Rochester Art Club will hold its annual exhibit in the three front rooms at the north. A sale of foreign photographs will be held in the art history room over the main entrance.

"The six dressmaking rooms will all be used, the first for the sale of home-made candy and ice-cream and the second for a large display of dolls, and prizes will be offered for the best of these. Another room will be used for palmistry and still another will contain an exhibit of photographs.

"In the basement beside the large dancing hall there will be lunch-rooms."

From this we learn how highly the gift of Mr. Eastman is appreciated by his fellow-citizens and also learn of the various departments of work which will have attention there.

The new building has three floors (basement, first, and second). Mr. Eastman has favored us with engravings of the ground-plans of these floors. They show how the whole grand institution is to be employed for the public good.

It will be seen that photography is not forgotten. Good!

## PRACTICAL NOTES ON DAYLIGHT ENLARGING.

MANY workers, says *The British Journal of Photography*, are deterred from employing daylight for enlarging by the belief that it means interfering with the structural portions or fittings of a room, such as having to cut apertures out of window shutters and to rig up outside the window some form of ungainly reflector which would prove an eyesore to neighbors. This idea is quite erroneous. The fact is the utilizing of any ordinary room for the purpose of enlarging is a matter of much simplicity and does not entail an amount of skill greater than is possessed by any ordinary individual and does not mean the cutting of window shutters or rigging up any outside reflector at all. Most people can, with the aid of a hammer and a few nails, knock together with a few pieces of wood an inner frame that will fit tightly so as to shut out all daylight, and then provide an aperture in the frame to admit light through the negative; while the light may be diffused not by means of an outside reflector, but by placing a sheet of ground glass a few inches in front of the negative. From time to time in the pages of *The British Journal of Photography* particulars have been given as to the most convenient means of fitting an ordinary window with a simple screen for the purpose of enlarging, so that it is really not necessary to refer to the matter at any length in this article. The main fact to be borne in mind is that once a worker enters into the spirit of the thing he will never regret having expended a little trouble in fitting up an ordinary room for this purpose. The cost is a mere trifle.

Not the least of the several advantages which daylight possesses over artificial light lies in the ease and certainty of obtaining an equal illumination over the surface of the negative. It is well known that by means of condensers used in conjunction with artificial light it is difficult to obtain

an equal illumination, and it takes a very expert operator to detect when a negative is not properly illuminated, although it may appear so to anyone unaccustomed to the work. This fact will be very soon realized when exposures come to be developed. On the other hand, when even such a simple means as the interposition of a sheet of ground glass between the negative and the light is resorted to, and daylight employed, a most beautifully even illumination of the largest-sized negative is the result. A worker will not be long before he finds out that one of the chief factors toward success, after he has provided an effectual means for evenly lighting his negatives, lies in that one word exposure. Here there is very little latitude, if only the highest class results are to be turned out. It must be borne in mind that no two negatives will hardly ever be found which require the same treatment as regards exposure, and there is only one royal road to success, viz., by running a pilot and carefully seeing that no alteration in the power of the outside light has taken place since the trial piece was exposed, exactly the same developing solution being employed in all instances. One of the best plans to adopt for gauging the correct exposure undoubtedly lies in a free use of strips of the same sample of bromide paper that it is intended to employ for the final enlargement, and it will be found to be true economy to cut up into long strips a sheet of the paper, placing them over the densest shadows and strongest high lights displayed upon the enlarging board or easel. One strip of paper may often be cut into three or more portions and varying times be given to each. On development it will be strikingly evident which is right and which is wrong. Since the introduction of such excellent samples of bromide paper, one of the great charms in enlargements produced with their aid lies in the purity of their color when metol is employed as the developer, and with many workers this chemical has been adopted in preference to ferrous oxalate, which reigned supreme for so many years. It is a mistake to suppose that the changes can be rung in respect of color by altering the developer. Pure high lights and good shadows can be obtained only by closely watching for the right time in exposure. Overexposure means nasty greenish-yellow, and underexposure produces general weakness of image, with poor, weak densities in the shadows, so that a worker would do well to realize the importance of finding the correct time to give, according to the stretch of the picture and the density of the negative.

Next to the importance of producing images of good color comes that of providing as sharp results as the negative will yield, and there is more in this than many might imagine. A suitable lens must be employed, *i. e.*, one capable of covering well the size of negative being enlarged; and if, as is often the case where portrait combinations are employed, spherical aberration be present, the lens must be stopped down considerably. One of the advantages attaching to the employment of portrait lenses lies in the comfort of being able to see the image clearly on the easel by reason of the amount of light they pass when the focussing is being done with their largest angular aperture. Many excellent objectives are, however, condemned in respect of covering power, when, in point of fact, the fault does not lie with them at all, but actually with the operator himself. In work of this description the focussing is performed often by means of a front-extension camera, and if the utmost care is not observed in placing the negative and rising front of the camera which carries the lens absolutely parallel to each other the enlarged images will suffer in respect of sharpness, and nine times out of ten either the negative is blamed for want of sharpness or the lens is not covering properly. A worker would do well to experiment in this matter by seeing how small a lack of adjustment of the lens to the true plane of the negative will throw the image out of focus on the screen or easel.

To enable focussing to be accurately performed there is no better plan than inserting a sheet of finely ground glass on the screen that carries the sensitive paper, and, at the same time, after the image has been brought to its utmost sharpness, finally examining the outside part of the image on a sheet of clean paper the same size as the sensitive sheet that is to be employed. Many negatives will come to hand for enlargement that are quite unsuitable, and

there will be those also that require dodging in exposure, *i. e.*, some parts will require shielding, so as to let the denser portions come up. A very little practice will teach a novice the enormous power that an operator possesses in this respect. A small piece of cardboard or a sheet of green glass wafted in the proper position in front of the lens, *i. e.*, between it and the easel, will work wonders in producing high-class results, and in some instances, where the peculiarities of a negative are unknown, it is worth while to pull off a silver print from it and study closely the behavior of the negative during printing; by this means, especially where enlargements of considerable size are produced, money will be saved by seeing where certain precautions must be taken to shield portions during exposure. Some delightful results are obtained by vignetting. This is easily performed by inserting suitable cut-outs at a proper distance from the sensitive paper. These cut-outs, masks or vignettes are sometimes conveniently held *in situ* by nailing them on to a box which has its top and bottom cut out, the box containing the vignette being placed on some support in front of the lens at the proper distance from the easel, or they may be nailed on to an upright rod having a heavy base, which will keep them in the exact position desired. In developing it is important to observe, when first soaking the paper in water, to cause it to lie flat, that all parts of the paper are equally damp. When operating on very large sizes it is at times difficult to get the entire sheet absolutely flat on the bottom of the developing trough; but with small sizes, where handy dishes are used and plenty of developer applied, this is not so liable to give trouble, and it is useful to have at hand a broad camel's-hair brush to guide the developer somewhat, but the best results are obtained when a plentiful supply of developing solution is applied dexterously and kept constantly flowing over the surface of the sensitive image. Development by brushing is a particularly nice parlor or class-room experiment to show to amateur workers, and, for small sizes, often yields nice results, but when working on large images it is fatal to high-class results unless an elaborate amount of working up has to be eventually performed. A brush is a useful adjunct for the developing table, but a plentiful supply of developing solution is the sheet-anchor where nice, level results are at stake.

## SUNLIGHT EFFECTS.

BY E. F. WALDO.

It has more than once been said that the American photographer seldom gives any suggestion of sunlight in his landscape work. This, of course, refers to "pictorial" work and not to mere "views of the district," in which a clear definition, accentuated by a detail-giving paper, is the main requirement.

The stricture is in a great measure true, and it is the more remarkable as this is a country of much sun. The tendency to gray-day effects is doubtless a following of the lead of English amateur workers, who a few years ago made a fashion of low, murky coast-lines, smoke-laden, commerce-crowded estuaries, and low-tide mud flats. The English fashion stood condemned just as soon as it became a fashion. Before that time a few capable workers, more or less earnest, reproduced the dull breadth of their favorite haunts. They expended much time in waiting for their required effects and often for a change of tide or light to alter their composition, and they went to much trouble in their faking or combining during printing. Their followers, neglecting the care shown by the leaders, manufactured their own "breadth" in the dark-room and printing-frame and played havoc with values. Too much of this false work has been done in America, and there are signs that ere long the fashion will change. At present sunlight landscape of a good, healthy kind is in the hands of a very few professionals, with an occasional very clever piece from an amateur camera.

There is much to be said for each kind

of picture. A sunlight picture means the sacrifice of much half-tone, though the same half-tone is often equally sacrificed in an attempt after "breadth" in gray-day effects. To render brilliant sunlight too often means harshness; in incompetent hands it drifts to mere "soot and white-wash"—that is, choked high lights and shadows of clear glass. This harshness is a rendering of what we really see, to a certain extent, in nature. In looking at, say, a white house the side in shade is about equally lighted on a bright as on a gray day; but on the bright day the iris of our eye contracts—so to speak, "stopping down" the eye—in response to the intensity of the brightest light, and this smaller stop allows less light to pass from the shaded part, this really giving it a darker appearance. As Sir William Abney said, some time ago, the pupil of the eye always contracts under bright light, and hence while looking at the sun-illuminated white wall the pupil is contracted, and the retina receives less light on it from the shadow sides, and is therefore visually darker than if it remained open to the extent it would do on a gray day, when the glare was absent. We have only to look in the camera to see this. We focus with a large stop and find that the highest lights are brighter than white paper in the shade, while the walls in shadow are perhaps grayer. We can insert smaller stops until the sunlight wall is within the range of brightness we require, but the walls in shadow will appear much darker. This is an example—perhaps exaggerated—of the action of the iris, which, in closing, makes the half-lights appear darker. Hence it appears that to give the true effect of sunlight as felt by the eye the half-shadows must be darker than the same objects (though equally lighted) would appear on a gray day. The golden rule in photography always has been to give proper exposure to the shadows and to leave the high lights to take care of themselves. This is a rule that should never be departed from, but it is in development that the true rendering of sunlight effect has to be made. By whatever plan that can be adopted, the details in the high lights and in the shadows must be brought out before the former are choked up and rendered flat. Manifestly to do this the stated rule should be followed, and only sufficient density must be given to the high lights as to render the small range of tones in them visible in the print. This in reality means sacrificing the middle tones, leaving but little for them to do. The mass of gradations have thus to be practically confined to the two ends of the scale, and it is this that gives the picture the feeling of being lighted by the sun.

There is nothing easier than to make a fairly good snapshot of a sunny scene, but to be master of this branch of work means being a very skilful photographer. All pictorial photographs are compromises, and the arrangement of the compromise is the work of the artist and the final test of his skill.

## THE AFTER-TREATMENT OF NEGATIVES.

BY E. NEVILLE.

BEFORE entering into the details of the processes of reduction and intensification stress must be laid upon the fact that all negatives to be treated must be free from grease or finger-marks, and from what the writer has seen of amateurs' negatives in general this is by no means an unnecessary caution. Solutions which have to perform such delicate operations as the two now under consideration must be free to act evenly and regularly upon the gelatine film if successful results are to be attained, but this is a matter of impossibility where grease is present. There is at no time any real necessity to handle the film of the negative, and the beginner should from the outset accustom himself always to hold his plates by their edges and to touch the film as little as possible.

But supposing that grease marks are present, the negative must be treated to a preliminary bath of caustic potash. A few drops of solution of potash (liquor potassæ) should be added to a sufficient

quantity of water to cover the plate, and the negative gently rubbed with cotton-wool dipped in the solution until no water is repelled when it is held under the tap. It should then be thoroughly washed, when, without drying, it will be ready to be operated upon.

The reduction of negatives may be easily accomplished as far as the actual process is concerned, but it is applicable only in cases where there is good gradation and overdensity, such as a properly exposed and overdeveloped negative would show or in overexposure where printing is a tedious operation. It is obviously unwise to attempt to reduce an underexposed negative where the contrasts are very great, because in so doing the shadows of the picture which in such instances are very thin and weak, would in all probability be destroyed altogether and the remedy prove worse than the disease.

The reducer most generally used is that known as Howard Farmer's solution. The reducing agent is ferricyanide of potassium—commonly called red prussiate of potassium—in the presence of sodium hyposulphite. A solution of the former salt is made of a strength about twenty grains to an ounce of water, a few drops of this being added to the hypo bath as used for fixing negatives. Sufficient only should be added to tint the hypo solution a lemon color, as its action is powerful and rapid. If more reduction be required the ferricyanide solution may be added drop by drop, but under no circumstances should this be done while the negative is in the bath, or absolute ruin will be the result. It is the better plan to stop reduction when the negative is, if anything, a little too dense, as there is always a slight action of the reducer during the first washings. Where this reducer is being used after a ferrous oxalate developer, great care must be taken that all traces of iron are washed away or a wholly unexpected and undesirable result may follow. Ferricyanide of potassium forms with the merest trace of iron in the *ferrous* state a dark blue pigment of ferricyanide of iron—known by the name of Turnbull's blue—which reaction taking place in the gelatine film will produce an indelible stain. It has been suggested that Farmer's solution is a good reducer for overdense bromide prints, but it is of course essential that the iron developer be entirely removed, in order that no stains may result. There are other reducers which are more or less certain in their effect, but the beginner cannot do better than use the above, always paying strict attention to detail.

Throughout all the processes attending intensification the greatest care is required, as at the best they are attended with more or less risk. The chemicals employed are, in most cases, powerful poisons. Both mercuric chloride and potassium cyanide are intensely poisonous, and the worker is cautioned to handle them carefully and store them in a safe place, if possible under lock and key. Then, too, negatives to be intensified must be absolutely free from every trace of hypo. As a rule, intensification is required for negatives which have been overexposed and through improper development are thin and ghostly, with the veil of overexposure upon them. To intensify these without preliminary preparation would only make matters worse by increasing the fog and rendering them quite unprintable; and therefore the ferricyanide reducer, as before described, must be applied with caution, in order that the fog only may be cleared away without actually reducing the image itself. The negative must then be thoroughly washed in many changes and finally immersed in a strong alum bath, when after another good rinsing it will be ready for the intensifier.

The best, and that which generally gives permanent results, is an intensifier with mercuric chloride as the bleaching agent and the ordinary ferrous oxalate developer. The intensification is more regular in its action, and there is far less risk of the formation of compound mercury salts in the film from the presence of minute quantities of hypo.

A solution of mercuric chloride, strength ten grains to the ounce of water, to which a few drops of pure hydrochloric acid have been added, should be made up and the negative bleached in this for a length of time proportioned to the amount of intensification required, or until the film is white right through; after which it must be again washed thoroughly and redevel-

oped in the acid ferrous oxalate developer as recommended for bromide paper. In all cases the development must be continued until the image is entirely blackened, and if the degree of intensification be then insufficient the whole operation from the beginning may be repeated as often as necessary.

The two points to be particularly remembered are—that the solutions be distinctly acid and that the negatives receive careful washing between each stage of the process.

It is necessary, immediately after removing the plate from the developer, to pass it through acidulated water for a minute or two, to prevent a deposit of oxalate of lime from settling in the film.

By the repeated application of this intensifier it is possible to build up the image of a negative from a mere ghost to one possessing good printing density, and that, too, without any of the unpleasant complications which often attend the use of some of the various formulæ recommended; it is also satisfactory to know that the results are generally permanent if the washing has attention.—*Photographic Scraps.*

## VARIOUS TONES ON PLATINUM PAPER.

THE problem of obtaining various tones on platinotype papers formed the subject of a highly interesting series of experiments at a recent meeting of the Borough Polytechnic Society. By modifications in the constituents and temperature of the developer a wide range of tones was obtained, and it was shown that even with cold-bath papers almost any tone from cold black to brick red could be produced at will, while in the case of the "sepia" paper the strength of tone and depth of gradation were very marked, according to the treatment it received. The following table gives the principal results of these experiments, with formulæ employed:

DEVELOPER.

| No. | Paper. | Potassium Phosphate. | Potassium Oxalate. | Mercury Bichloride. | Citric Acid. | Water. | Temperature of Developer. | Result. |
|---|---|---|---|---|---|---|---|---|
| 1 | AA | ½ ounce | ½ ounce | ..... | ..... | 5 ounces | Warm, 70° | Warm black. |
| 2 | AA | ½ " | ½ " | ..... | ..... | 5 " | Hot, 170 | Warmer black. |
| 3 | AA | ½ " | ½ " | 30 grains | ..... | 5 " | Hot | Brown-black. |
| 4 | CC | ½ " | 1 " | 30 " | ..... | 5 " | " | Cold brown. |
| 5 | CC | ..... | 1 " | 30 " | ..... | 10 " | " | Warm brown. |
| 6 | AA | ¼ ounce | ½ " | 30 " | 10 grains | 10 " | " | Cold sepia. |
| 7 | AA | ..... | 1 " | Abnormal quantity | ..... | 10 " | " | Brick red. |
| 8 | CC | Company's | D salts 1 oz. | 30 grains | ..... | 1 pint | " | Rich brown. |
| 9 | CC | Company's | D salts 2 oz. | 30 " | ..... | 1 " | " | Sepia. |
| 10 | RS | ½ ounce | 1 ounce | 3 " | 10 grains | 5 ounces | " | Warm brown. |
| 11 | RS | ½ " | ½ " | ..... | ..... | 5 " | Warm | Rich brown. |
| 12 | RS | ½ " | ½ " | ..... | ..... | 5 " | Hot | Purple-brown. |
| 13 | RS | ½ " | ½ " | 30 grains | ..... | 5 " | " | Sepia. |
| 14 | RS | ½ " | 1 " | 30 " | ..... | 5 " | " | Warm sepia. |

## PICTORIAL COMPOSITION IN OUTDOOR WORK.*

BY REV. F. C. LAMBERT.

WE all know, only too well, how the best story may be ruthlessly murdered by being badly told; and, also, how a good story-teller can hold us entranced simply by his way of "putting things."

And, after all, what is a picture but a story of some sort, appealing to the eye instead of through the ear? Who does

* Reprinted by request from *Photography Annual*, now out of print and unobtainable.—ED. W. P. M.

not know how some "bit" may be rendered by two different workers in a way so entirely different from each other that it requires some effort to believe that they both had the same materials before them, and yet have produced results with so little in common.

The same incident or scene may be described, told, painted, photographed, sketched, by half-a-dozen equally honest workers, and yet they may produce not one, but six, vastly different results.

Word-painters (from Homer downward) have always (and rightly) exercised every care in selecting and clothing their stories in an appropriate and becoming dress, so as to be as "telling" as possible. The eye-poet must, in like manner, use every care in selecting and arranging (*i. e.*, composing) his material, with a view to making his story not only intelligible, but also as "telling" as possible, otherwise his story is destined to prove "flat, stale, and unprofitable."

Well, then, let the photographer gather a hint from the story-teller, be he historian or poet, the interpreter of fact or fiction.

*A*. Observe, then, that the first condition of success demands that the thing told, painted, photographed, etc., be worth recording. It must have a point, a *raison d'être*, otherwise the result will be only an ass in lion's skin. In other words, before exposing a plate be sure that the scene is worth the subsequent trouble of developing, printing, etc. Have in your own mind some measure of reason for your selection. It may be a pastoral incident, a bit of river-bed with water-worn rock telling its tale of the past, a bit of open, flat moorland, without the sign of human life—a very picture of lonely, uncultured isolation, desolation, etc. Whatever the nature of the scene you fix upon, the point of view, etc., let it be your own in the sense that you are doing it because you yourself see its beauty and worth and *not* because it resembles Smith's or Jones' recently medalled picture. First and foremost, then, be honest with yourself, and let your subject be your own and not a feeble imitation of someone's else work; and have some sort of reason to give yourself (though, perhaps, you cannot exactly put your reason into definite word form), yet there should be something like a reason why you fix upon that particular view in preference to another.

*B*. Having settled upon a certain scene, and knowing that you wish to express some general direction of thought, *e. g.*, spring shower, coming storm, etc., the next thing to consider is—how can this be done so that others may see the scene, as it were, with your eyes? Some slight mental analysis will at once suggest that there are present certain features—as an old tree, rock, gleam of light, etc.—which you feel that on no account must be omitted. The second step, then, is to determine what is really *essential* to carrying out the idea, expressing the sentiment of the scene. What now remains is either immaterial or detrimental. Obviously, the last must be omitted if possible, or, at least, subdued, or in some way rendered as little obtrusive as possible.

*C*. Now we have arrived at our subject —that is, we know what we want to say; what must be included; what we should like excluded; and a remaining part that may or may not be made use of, as the nature of the case must determine. It now remains to compose, *i. e.*, arrange the parts of the subject in hand. Obviously, as the particular circumstances of each individual case will vary very considerably, only general suggestions can be given, and these will be found to be applicable in very varying degrees. While it is convenient to speak of laws of composition, it is always to be remembered that the word law is used as roughly equivalent to "a general guiding principle observable in the majority of the works of the most successful art workers," and not a rule which must in any and every case be rigidly observed.

### 1. *Law of Principality.*

This properly stands first, for unless this law be observed the resulting work is nearly always of a feeble character, and is like a story without any moral, point, or pith. As a general rule, it will be found that that particular feature, be it a bend in the river, a bit of rock foreground, etc., which first attracted attention should be

reckoned the leading feature, the principal element in the subject. Anything which tends to lead the eye away from this pictorial centre (which seldom or ever should be in the exact middle of the picture) should be subdued or repressed. Any "opposition chief" will, of course, tend to draw off attention, and must be made subordinate, either by moving the camera nearer or further away to one side or nearer the ground. Suppose, for instance, the principal object be a large rock in a river-bed, and there is a rival rock drawing off too much attention. Number two cannot be moved, and, therefore, must be endured. This, perhaps, may be done by so altering your position that the objectionable feature is partly hidden by a brush or thrown into a mass of shade, etc., by moving the point of sight. Let it be observed that the photographer has much more power over the composition of his foreground than is generally supposed. Comparatively few workers ever think of employing a point of sight about two or three feet from the ground, and yet in many cases the advantages of this position are immense. This law applies with much force to the larger divisions of the picture. For instance, if you are attempting a subject in which the sky and cloud are the chief feature, then all else must be made as simple and unobtrusive as possible. Again, if your chief interest is in, say, the middle distance, then the extreme distance and the foreground should both be kept simple, quiet, and undemonstrative.

This law applies to the more important lines of a picture. If there are two or more prominent and equally important lines they tend to struggle with each other for the attention. It applies also to the important masses of light and shade. As a rule, more than one strong high light tends to weakness and confusion. In this matter the work of Rembrandt and Turner offer numerous examples. If figures are introduced, and there are several groups, one group should be made more important than the others. And, again, in a single group there should be some one figure (not central) that takes a lead, while the other figures are subordinated to and connected with their "chief" in some way.

2. *Law of Subordination.*

This principle flows as a corollary from the last. By the former we are taught to make some one chief part, line, light, mass, etc., some leading feature. Subordination teaches us to arrange the remaining parts in what may be roughly described as a descending order of importance; so that no two parts contend for or equally divide the attention, but, on the contrary, each part or element hands on the attention, step by step, to the central feature of interest. This principle is one of considerable importance in the grouping of figures. Its far-reaching importance may be seen in many of the figure pictures of Titian, Palma, Leonardo, Veronese, and others. It may be seen applied to lines and forms in the work of Burne-Jones, Sir F. Leighton, Alma Tadema, etc.

3. *Law of Unity.*

In some senses this law or guiding principle should stand first, seeing that without this quality the work is not one complete whole, but several parts or portions not united. The object of a work of art is for the most part that of conveying a more or less definite impression as a whole. Hence, if any feature is present which tends to cut up or subdivide this impression the result is felt to be incomplete and unsatisfactory.

As one instrument or voice out of tune with the other parts of a musical performance will mar the whole, so will one part of a picture out of harmony, *i. e.*, unity, with the remaining parts, in like manner tend to greatly injure the completeness of impression. This law is not so likely to be ignored by faults of omission as by those of introduction.

As a simple example take that of the sky and a landscape subject. We may rest assured that, however dull and uninteresting the sky and cloud may be at any given moment, yet it will never be out of harmony with the disposal of light and shade of the landscape. This much can hardly be said for some pictures with skies "printed in" from separate negatives. It is not always possible to secure the sky and cloud on the same negative as the ground, but whenever it be possible it is

desirable to do it. And this for at least two reasons: *firstly*, a correct, *i. e*, true sky, even if somewhat uninteresting (*i. e.*, devoid of strongly marked features), is better than the most showy "printed in" sky if the latter has a taint, a mere suspicion even, of untruth; *secondly*, in those cases where, for some reason or other, the sky on the negative is undesirable or unprintable. Yet it will be in itself valuable as suggesting the most appropriate sky that may be printed in from some other negative.

Where the beginner is most liable to err is where he attempts the introduction of figures, animals, costumes, accessories, etc., without having very carefully and calmly considered if these introductions really assist the work in hand, are needful, are appropriate to their surroundings, suitably dressed, naturally occupied, etc.

Anything which suggests the notion of unfitness is a sure sign of offence against the law of harmony. For instance, the introduction of a person in a "tall," "chimney-pot," "stove-pipe," "plug" hat as the accompaniment to, say, a lifeboat would strike most people as somewhat out of harmony.

### *Breadth.*

There is another important element contributing greatly to the general unity of a picture, viz., breadth. By breadth is meant the grouping together of those parts which are related to each by the quantity of light (or absence of it, *i. e.*, darkness). Now, as the outdoor worker cannot do much in the way of uprooting trees and overthrowing mountains he must perforce wait until the sun works round to such a position that the light and dark parts are grouped together. Hence the importance (to the outdoor worker) of seeing his proposed subject under various conditions of lighting—morning, noon, and evening. A certain scene may be strictly commonplace when seen in the morning and yet take on an enchanted form when the evening sun is low. The poets have all been ready to seize upon dawn, sunset, moonrise, etc., as times when fancy gets most ground for play. Without pictorial illustrations it is difficult to give practical help beyond that of a most general, and for the most part suggestive, kind. This much, however, may be borne in mind, viz., that the shadows and shaded parts are often the most effective part of a picture. Hence it is, as a rule, better to have a preponderance of shadow (not too deep) than of bright high light. Also, when the shadows tend to run toward rather than from the spectator, the effect of relief is generally better sustained, and hence, when the sun is somewhat toward the front rather than toward the back of the spectator this effect is obtained.

Let it be observed, however, that there are cases where a slight alteration of the point of sight will assist in bringing about breadth. Obviously, any change which helps to unite one shadow with another will tend in this direction. The fact that many photographs on which trees figure largely are generally felt to fail pictorially is often due to "spottiness," *i. e.*, many small patches of light finding their way through the darkness of the foliage.

### *Simplicity.*

Breadth obviously leads to simplicity of arrangement of light and shade. In simplicity, as in unity, there is often the greatest interest and strength. With many beginners the desire to render every plane of the picture, as well as every detail in the foreground, in the finest and sharpest degree of detail is a desire which is apt to run away with him. And while detail and breadth are by no means contradictory terms, nor do they stand for qualities incompatible, yet if the desire for detail be not kept under control the possibility of obtaining breadth and unity is very greatly increased. In the majority of cases, where pictorial effect is desired, it is better to devote attention, first, to obtaining breadth, and then to the expression of such degree of details as will tend to emphasize and support the principal feature or theme, and at that point to be content, remembering that further degree of detail is dividing, and therefore weakening, the interest as a whole.

### 4. *Law of Contrast.*

This term is usually limited to the contrasting of light and shade, *i. e.*, bringing into close or immediate contact on the

plane of the picture such parts as are in strong light with others in strong shade. By this plan the light is made to appear lighter and the dark darker. (This may very easily be put to experimental test by employing bits of white, gray, and black paper.)

Those pictures which are usually associated with the method of work in which the great Rembrandt excelled are often made to rely upon the device of bringing the highest light in close contact with the deepest shade; as, for instance, when the snowy locks of some octogenarian are crowned by a black velvet cap.

As the outdoor worker is for the most part employed upon things which cannot be moved about at his will, he (the worker) must rely for whatever effects he aims to obtain upon the point of view chosen and the time of day, *i. e.*, state and direction of lighting.

Many fine photographic effects have been obtained by employing simple subjects and relying upon contrast for expression of effect. The operator may often find some old tree-trunk, sail, mast, ruined tower, rock, etc., which, by a suitable position of the camera, he can bring up against some gleam of light struggling out between a cloud-rift.

Attention is urged to this method of working because by its means breadth and simplicity of arrangement may often be obtained.

The student will do well to remember that the simple expedient of lowering the camera to the height of the eye of a person when seated will often have the effect of compressing an uninteresting foreground, and bringing up stunted forms in the immediate foreground, so that they stand out in the relief of contrast, either against the gray distance or still lighter horizon sky. The beginner is apt to forget the fact that the majority of outdoor painters work seated, and that often upon a *low* camp-stool.

The principle of contrast is, however, by no means to be limited to the juxtaposition of light and dark part. It applies (*mutatis mutandis*, of course) to *lines*, *i. e.*, *versus* curves; straight forms, *i. e.*, those bounded by straight lines, etc., *versus* curved surfaces; degrees of definition, interest, etc. With regard to the contrasting of lines the student will no doubt have noticed the difficulty in determining the degrees of inflection in delicate curves, but so soon as a straight line is brought close to such a curved line the subtlety of its curvature is at once appreciated. This is often to be observed amid the cordage rigging of water craft, where the catenary curves are in contrast with the (nearly) straight lines of the masts. It will also have been observed that in many scenes where there are no well-marked straight lines a certain measure of weakness is felt; whereas, if one or two straight lines (distant water, horizon lines, etc.) be introduced with care a feeling of firmness and strength is imparted. This applies to form also. As, for instance, among a mass of rounded, water-worn rocks there be one or two bits showing recent angular fracture; this element not only adds to the interest by variety, but also adds value to the curved forms by contrast. In short, it may be said that, on the one hand, we may have contrast, variety, interest, emphasis; on the other, repetition, monotony, weakness.

### *Law of Balance.*

This may be almost said to follow from the last considered principle. Contrast is the juxtaposition of opposites, so that each emphasizes the other. Balance is the opposing of opposites—not necessarily in juxtaposition—chiefly with a view to prevent monotony. Thus, several important lines pointing toward one and the same direction induce monotony and fatigue; whereas, if one or two be introduced in a somewhat contrary direction, variety giving the sense of compactness and stability with interest then follow. Similarly, if all the light part of a picture be on one side and all the dark on the opposite the result is felt to be one-sided and incomplete, but if some shade be carried into the light part, and some of the light replace the shade, variety, and with it additional interest, follows. Obviously, if this process be carried to excess the evil of spottiness, patchiness, and confusion must arise. Hence here, as in all other laws or principles, it behooves the student to avoid excess of any kind.

As soon as any one of these devices becomes manifest it has most probably been used to excess and to the detriment of its counterbalancing principle. Thus it will be seen that great care and a nice judgment are required, so that the artist may use this or that device in such a natural, unsuspected, and consistent manner that the spectator is agreeably impressed without being distinctly conscious of any special or emphasized cause for the impression.

The student will observe how easy it is, when avoiding one undesirable effect, to pass into some opposite extreme. Thus, when avoiding the extreme monotony of breadth, when carried to excess one may easily pass to the opposite evil of spottiness. Similarly, if the worker is, for the moment, carried away by the idea of obtaining efficient balance he may overlook the fact that this tends to destroy or counteract the law of principality. For instance, suppose his subject be a rustic bridge, and he waits until a boat comes nearer and nearer to give balance of interest, when presently his boat becomes all important and his bridge sinks into insignificance—hence the soundness of the advice, "the simpler the better." In the majority of photographs the chief and first felt defect is one of *too much subject.* The many little unnecessary details are so many channels whereby the attention is being drawn off from the chief and principal subject.

To sum up the matter briefly, so that the outdoor worker may have something to think over as he wanders about in search of the picturesque (and of fame), let him remember—

(*a*) To be sure that the thing to be done is worth doing, and doing with the best ability he can bring to bear upon it—quality, rather than quantity, being his aim.

(*b*) To see the subject under as many different aspects, points of view, lighting, atmospheric conditions, etc., as possible, so that the best, most telling effect and time be chosen.

(*c*) To have some chief important feature, theme, idea, story, or moral point let it say some one thing definitely, distinctly, and unmistakably.

(*d*) To let all else fall into the second, third, fourth . . . rank, and yet that all other parts, as far as may be, tend toward and help the story, support the theme, and not contradict what you have to say.

(*e*) To take care that nothing, or as little as possible, is present which can suggest unfitness, unappropriateness. Let all the parts "pull together"—"a gloomy sky and a weary moor."

(*f*) To remember that nothing is more "unforgivable" than insipidity, and that any feature, light, curvature, etc., may be emphasized by judicious introduction of its opposite.

(*g*) To remember that the mind objects to monotony and finds interest in variety. Hence a pleasure is felt in passing from one object to a *somewhat* similar one, but little or no interest is felt in passing from one thing to another so like it that it is a matter of irritation to know wherein lies the difference.

The following hints of what *not* to do may also be noted:

1. Do not place the most important feature in the middle of the picture.

2. Do not have your horizon line halfway up the picture.

3. Avoid strongly marked straight lines parallel to and near any of the margins of the picture.

4. Avoid rows of things placed at equal distances, and especially if they appear at anything like equal distance in the picture plane.

5. Do not have all your interest on one side of either median line (vertical or horizontal).

6. Avoid, as far as you can, any strongly marked lines which meet at or near a right angle. [Exceptions, buildings and sea horizon.]

7. Avoid photography with the sun exactly behind your back, as shadow-relief in this position is next to impossible.

8. Avoid any strong line or feature (*e.g.*, tree-trunk, etc.) which divides the picture either horizontally or vertically into equal or nearly equal parts.

9. Be careful lest the background of any figure or animal introduces confusion—*e.g.*, one may see a distant church apparently resting on the back of a cow, or a flower-pot behind a human head appearing as a startling innovation in hats.

10. Don't affect to despise all laws and examples which the accumulated experience of ages has confirmed and then call your action originality; but walk before you run. Give a thing a fair and just trial before you reject it as worthless. Whatever you set about doing, aim to do it to the very utmost of your ability, and don't be above acknowledging a failure nor neglect to learn the lesson that every failure teaches.

Earnestness of purpose and simplicity of action are the best aids for an honest man, be he prince or peasant, artist or artisan. The successful man is the man who will "take pains."

## NEWS AND NOTES.

*The Closest Approach to Daylight.* Mr. Tesla describes a new illuminant as follows: "This light is the result of continuous efforts since my early experimental demonstrations before scientific societies here and abroad. In order to make it suitable for commercial use I had to overcome great difficulties. One of these was to produce from ordinary currents of supply electrical oscillations of enormous rapidity in a simple and economical manner. This, I am glad to say, I have accomplished, and the results show that with this new form of light a higher economy is practicable than with the present illuminants. The light offers, beside, many specific advantages, not the least of which is found in its hygienic properties. It is, I believe, the closest approach to daylight which has yet been reached from any artificial source. The lamps are glass tubes which may be bent in any ornamental way. I most generally use a rectangular spiral, containing about twenty to twenty-five feet of tubing, making some twelve to fourteen convolutions. The total illuminating surface of a lamp is from 300 to 400 square inches. The ends of the spiral tube are covered with a metallic coating and provided with hooks for hanging the lamp on the terminals of the source of oscillations. The tube contains gases rarefied to a certain degree, determined in the course of long experimentation as being conducive to the best results. The process of light production is, according to my views, as follows:

"The street current is passed through a machine which is an electrical oscillator of peculiar construction and transforms the supply current, be it direct or alternating, into electrical oscillations of a very high frequency. These oscillations, coming to the metallically coated ends of the glass tube, produce in the interior corresponding electrical oscillations, which set the molecules and atoms of the enclosed rarefied gases into violent commotion, causing them to vibrate at enormous rates and emit those radiations which we know as light. The gases are not rendered incandescent in the ordinary sense, for, if it were so, they would be hot, like an incandescent filament. As a matter of fact, there is very little heat noticeable, which speaks well for the economy of the light, since all heat would be loss. I have found that in almost all its actions the light produces the same effects as sunlight, and this makes me hopeful that its introduction into dwellings will have the effect of improving, in a measure now impossible to estimate, the hygienic conditions. Since sunlight is a very powerful curative agent, and since this light makes it possible to have sunlight, so to speak, of any desired intensity, day and night, in our homes, it stands to reason that the development of germs will be checked and many diseases, as consumption, for instance, successfully combated by continually exposing the patients to the rays of these lamps. I have ascertained unmistakably that the light produces a soothing action on the nerves, which I attribute to the effect which it has upon the retina of the eye. It also improves vision, just exactly as the sunlight, and it ozonizes slightly the atmosphere. These effects can be regulated at will. For instance, in hospitals, where such a light is of paramount importance, lamps may be designed which will produce just that quantity of ozone which the physician may desire for the purification of the atmosphere, or, if necessary, the ozone production can be stopped altogether."

*Supplementary Lenses.* At a recent meeting of the Photographic Club (London) a discussion took place concerning the "magnifying" or supplementary lenses such as are advertised here and abroad. The discussion began with the question whether the addition of a single lens, as a magnifier, to a rapid rectilinear lens impaired its quality or interfered with the coincidence of the chemical and visual foci.

Mr. F. A. Bridge said he had tried these supplementary lenses, but found that it was very difficult to get really sharp pictures at the distances specified by the makers. He believed it to be a safe plan that the square of the focus of a lens in inches, taken as feet, expressed the distance at and beyond which all planes were practically at one focus. For instance, with a five-inch lens, twenty-five feet and beyond would always be in focus.

Mr. Hans Muller criticised the performances of the so-called "magnifiers" referred to in the question, and expressed his conviction that their capabilities were grossly overrated for the distances at which they were supposed to produce sharp images.

Mr. E. W. Foxslee referred to a lens that was brought out by Morrison, the front of which was an achromatic lens and the back a single glass. The focus of the compound could be altered by changing the single glasses. He had one of these lenses, but not with the supplementary lenses.

Mr. Bridge considered that, as a general rule, lenses like those under discussion were in the same category as most universal things—doing most things badly and very little well. He had, however, seen some very good work by Mr. Dugdale, who had a series of lenses properly worked out with a view to interchange in this way.

Mr. Foxslee added that he was in possession of a casket of Darlot lenses, which were very complete and useful. There were fourteen separate lenses and a portrait lens as well, giving combinations varying in the foci from 1¾ inches up to 9 or 10 inches.

*Enlarging with Magnesium Ribbon.* At the last meeting of the Photographic Society of West Surrey, Mr. J. Bulbeck gave a demonstration on enlarging with magnesium ribbon. The means he adopted was the firing of given lengths of the ribbon, thus doing away with the uncertainty and risk of the usual waving-the-wire method.

His mode, as he proceeded to show, was to fix two side pieces, about 2½ inches deep, to the frame holding the carrier for the negative to be enlarged, and to string from side to side, just above the negative, a fine wire. To this he hung three lengths of ribbon, each about 8 inches long, as he was enlarging from half-plate size to 12 x 10. Between the ribbons and the negative he hung a piece of parchment paper to diffuse the light, using thicker or thinner paper as he thought the density or otherwise of the negative required.

All being ready the three ribbons were lit from below, and when all were burnt the result, as shown on prompt development, was a first-rate enlargement. Mr. Bulbeck was just as successful with a second exposure with another negative selected by the members.

Indeed, as he pointed out, the most admirable feature of the method was the ability to repeat a success by repeating the means used the first time. In the case of very dense negatives a fourth ribbon could be hung, and they could be hung at distances apart that should agree with densities on the negative if required.

Where the expense of so large a condenser as half-plate enlarging required was too great and where daylight was unavailable, as it so often was in London, he thought the method he showed was the easiest and best, an opinion that was certainly indorsed by the members present at the meeting.

*Miniatures.* The following practical suggestion from the *Amateur Photographer* indicates an acceptable way of handling "copies" of small size which will bring the photographer a good price. If tastefully done the finished miniature will prove altogether acceptable to the patron, who is usually prepared for disappointment in the coarseness of copied pictures:

"Many have among their treasures carte-de-visite photographs of friends and relatives taken many years ago. These

are of the old-fashioned style, both in dress, in the backgrounds, and the furniture which every photographer thought was absolutely necessary in those days—the chair, table, and the pedestal which the sitter always had to lean against; the male creature's hat, stick, and gloves were placed on the former. All this is contrary to our present ideas of the artistic photograph. Still there is hope for them, and the result will well repay what I suggest being done, and it is what I have done myself. Miniatures are becoming very fashionable as adornment for the walls of our rooms. Copy these old photographs is the idea. The miniature frames usually sold are circular or elliptical. It is advisable to go to the man who supplies you with frames and get the different sizes he keeps in stock, and mark these on the ground glass of your camera and reduce the photographs to the size which is most suitable. A difficulty will be found in getting rid of the grain of the paper. This seems to be especially so in the very old photographs. The many books on photography will give full instructions on copying. One thing is, never use a side light, which is fatal. A front light is what should be used. I place the picture to be copied on a board, on a table, with a window behind, so that the light falls direct on it. The best printing paper is platinotype or bromide, but, of course, opals may be used. The latter are more difficult for the ordinary amateur. A good deal of retouching may be necessary both on the negative and the print, owing to the age of the original and the rough usage it may have received. I found a good deal was necessary in one of myself, taken in the days of my youth, in 1863. The best miniatures, in my opinion, are from photographs in which naval or military uniforms appear. Miniatures need not be confined to copies from photographs only—oil paintings, engravings, etc., are all suitable. If anyone cares to try this hint I am sure they will like it, as I have."—F. H.

*Cleanliness* and order, tact, courtesy, cheerfulness, however trying things may be; a thorough grasp of all the details of the business; resittings, if necessary; careful printing and finishing; all proofs promptly sent out and none sent out unretouched or unfixed—such "details" properly attended to go far toward a successful business.

*A well-known* professional writes: "Thank you for sending me extra copies of the MAGAZINE with my pictures, and, as a sort of grand wind-up, *Mosaics*. Well, the numbers of the MAGAZINE are very good, but *Mosaics* reaches high-water mark. Without a doubt it is the best annual I have received. Both in matter and illustrations it appears to be a text-book of up-to-date photography, and you have done me signal honor in putting my work in such good company in your productions. The frontispiece in *Mosaics* by Core is a masterpiece, and I think the portrait by Hollinger is very clever. The studies by Collings, Somers, Jansen, Pierce, and Schloss seem to me particularly fine, but it is difficult to select from so many of high merit."

"*The distinguishing* feature of American photography," recently said a visitor from Europe, "is the care put into every detail. You do not, as with us, hand over a negative to the printer and let him make a dozen prints, some light, some dark, and you do not mount a couple of hundred photographs in an hour. Every print is turned out perfect and every mount is carefully chosen." As far as our leading men are concerned there is considerable truth in this statement.

---

Remember that roundness and modelling should not be the work of the retoucher, but should be obtained by careful lighting and a full exposure.

It is not a well-lighted studio which makes a good picture, but the way in which that light is handled in conjunction with the sitter.

Luck is a fool, pluck is a hero, and chance in photography leads to disaster.

Plates *can* be washed too much, but more often they are washed too little.

MR. WILL ARMSTRONG
President Lens and Brush Club

FRANZ GEISLER
Lens and Brush Club

By MORRIS BURKE PARKINSON
Boston, Mass.

MR. J. H. GARO
Lens and Brush Club

By W. H. PARTRIDGE
Boston, Mass.

PORTRAIT
By Will Armstrong

By HENRY H. PIERCE
Providence, R. I.

By J. H. GARO
Boston, Mass.

# THE LENS AND BRUSH CLUB.

BOSTON, MASSACHUSETTS.

PORTRAIT.
*By Franz Geisler, Boston.*

WHEN, during the glorious September days of last year, we made pilgrimage to the Boston convention, the air in and about Copley Hall was so surcharged with Art and Enthusiasm that we "felt it in our bones" that something was about to happen. The quality of the work displayed in that hall of fame was remarkable, but not more remarkable than the spirit which animated the men who there displayed their skill in the work. It was an inspiring sight. President Pierce, divested of his Rembrandtesque cloak and hat, but invested with the dignity of the presiding officer; Secretary Collings, with cheerful face and that air of "we are the people" which belongs only to those who have shaken hands with Mark Hanna and others in high places; the venerable Darius Cobb, expounding the eternal verities of art; the philosophic Allen, quietly but none the less ruthlessly dividing the sheep from the

goats among the pictures—and picture makers. It was, we say, an inspiring sight. There was an air of suppressed excitement about everyone, from the Hon. T. W. Pattison to the man who sold the peaked caps which Mr. Collings denominated as the official badge of the New England elect. The convention passed and the convention banquet, and the choosing of the "Interstate Exhibit." All these things passed. But the inspiration remained and crystallized in the "Lens and Brush Club, Boston, Massachusetts." Since when the solar light has never failed to shine in Boston.

What is the Lens and Brush Club? It is a work of art: wherein there is left abundant scope for the imagination. We are privileged to offer herewith faithful likenesses of some of its members and examples of their work, by which the discerning may measure the quality of the club.

BISHOP WALDON.
*By W. F. Core, Cincinnati.*

The Lens and Brush Club was organized on the first of October, 1900, with nine members, and Mr. W. H. Partridge was chosen as the first president. The mem-

bership was divided into "active" and "honorary," but who the "actives" were and who the "honoraries" history has not told us. The aim of the club is the same as that set forth in the constitution and by-laws of all similar organizations, but the method of advancing that aim differs somewhat in that special attention is given to photographic technique and the development of a thorough understanding of pictures before any attempt at production is made by its members.

The charter roll of the club closed November 23, 1900, with a membership of fifty photographers, artists, critics, and lovers of the beautiful—comprehensive, inclusive, and generously broad; a membership which gathered in New England's brightest and best photographic workers. Until February of the present year the club met every other Friday, the average attendance including a large majority of its members.

The midwinter dinner of the club, in January last, brought forty-five of the fifty members around one hospitable table, and with them were thirty-five guests, including the officers of the New England Photographic Association and others of light and learning. We treasure the platinotype menu of the affair as a bright memory of a feast we had to miss.

At the annual meeting, held in February, Mr. Will Armstrong was elected President of the club for the ensuing year; Mr. W. H. Tupper, Vice-President, and Mr. J. H. Garo, Secretary-Treasurer. The limit of active membership is now placed at 200 members, and this limit has already been practically reached. In a few weeks the club will open permanent quarters at a central location in Boston, where a salon will be established with other educational features not at present available, such as a class for "drawing from the life" and the like.

The meetings of the club are devoted to an hour's talk on practical photography and the criticising of pictures produced by members. Pictures criticised at one meeting are brought forward again at the following meeting, with such alterations and changes as were suggested, so that the whole club may have the advantage of practical demonstration of different ideas.

The club is unalterably opposed to the awarding of prizes and medals, and the only recognition of its approval is a seal, which is bestowed upon pictures of undoubted excellence. Although in its beginning a professional organization, the membership of the club is now open to all picture makers and picture lovers, and includes many of Boston's leading amateurs.

These few details, unfortunately, exhaust our present knowledge of the Lens and Brush Club, of Boston, Massachusetts. Had we attended that midwinter dinner the account would undoubtedly have been more interesting. Our information comes from an enthusiastic member, and his sketch is delightfully vague. That the club is a help and inspiration to New England photographers is evident beyond the shadow of a doubt. May it flourish and prosper.

## PHOTOGRAPHY AS A PROFESSION.

BY WILL ARMSTRONG.

AMONG the many obstacles which make difficult any real advancement in the dignity and standing of photography as a profession is that no sooner does a man or woman become possessed of a camera than he or she is immediately recognized and proclaimed as a photographer.

I know many such photographers—some of them proprietors of studios, others without this trade-mark—who have no right to the proud title they assume so lightly, and who never made a good or even a fair negative in all their experience; and yet some of their efforts, generally failures from the photographic point of view, have been termed artistic. In most cases these results have been the outcome of pure accident.

When we are told that such a person is a painter the first question that arises is: What does he paint? Does he work in oil or water-colors? Is he a landscape, or genre, or portrait painter? And if the term was as broadly and as loosely applied

as the title photographer the question would have to go further and inquire whether the person in question was a house painter, wagon striper, or sign decorator.

We are sometimes told that a man paints, but the phrase is not applied to the amateur who dabbles only now and again in this particular field of art.

*By W. F. Core, Cincinnati.*

In our profession, unfortunately, a photographer is a photographer, and the poor dabbler, who knows nothing but the smattering of technique drummed into his head by a zealous demonstrator, or the conceited amateur who floats into photography from an "art class," are spoken of as belonging to the same class and profession as the gifted Napoleon Sarony.

Why should there be a distinction among painters and no distinction among photographers?

Photographers who are serious in the pursuit of their profession should band together, as men in other professions are banded together, for their mutual protection and advantage; also they should endeavor to establish a reputation for individuality, so that each man's work will stand out distinct and apart from that of his neighbor, marking him as a master in one particular line of work. When this is accomplished photography will take its place among recognized professions and will not need *elevating*.

Photography is only a means of portraying or reproducing things. What the photographer of to-day needs is the courage to create something and by means of his photography give his creation to the world.

A few years ago some one advocated the theory and criticised all pictures along the lines of centralization of light. What was the result?

One year later ninety per cent. of the prints at the National Convention were produced from negatives which showed that their makers had read or heard every word that had been said about this method; but I cannot recall more than two exhibits which showed a true appreciation of that old painter's idea, and in both cases the pictures showed the creative power of the maker in a marked degree. In looking over some of the illustrations that have appeared in the photographic journals of the past year the tendency to imitate some successful exhibitor at the conventions is greater than ever. This, to my mind, is a mark of timidity—nay, worse,

of mediocrity. In fact, Elbert Hubbard's quotation of Wallace in the February *Philistine* might aptly be applied to the photographic fraternity of to-day—*i. e.*, "The herding instinct in animals betokens fear," which quotation may be followed by another in Hubbard's own words: "Sheep herd, but goats flock by themselves;" for there is no question but that at present our profession is producing a goodly number of goats. By this I mean men who have the courage to proclaim themselves by giving to the public the creations of their brains and showing a willingness to sink or swim with their convictions.

In direct opposition to this class is the photographer (?) who never even attempts to make a photograph. Think of it! the proprietor of a large establishment told me a few days ago that he had never focussed a camera, and did not know what made the plate sensitive to light! This man has an established reputation as a photographer of unusual ability, and yet he would have to close his doors if he could not buy the brains of some other worker who could make photographs.

Think of a man applying for a physician's diploma who had not studied medicine or for admission to the bar who had never read Blackstone!

The successful men in these professions realize that to become proficient they must adopt some one branch of work and apply all their energies and resources to the perfecting of their knowledge in that specialty.

When photography reaches the same plane as law and medicine the old adage that "blessed is that man who has found his work" will be appreciated, and then the brains of a master will not be offered at so much per week, to be leased by a tradesman whose only claim to fame is in his bank account.

A SUGGESTION IN TRIMMING.
*By W. M. Gatch, Bellefontaine, O.*

## ESSENTIALS IN CARBON PRINTING.

BY J. MORRIESON.

THAT the purity of the high lights, the delicacy of the half-tones, and the depth and richness of the shadows place carbon easily in the first rank among photographic printing processes I think will be readily admitted by all those capable of seeing. The

single transfer is unquestionably superior to the double as giving the most delicate results, since in the double transfer some of the delicacy is lost, which can no doubt be obviated by collodionizing and better still by transferring from bichromated gelatine or albumen, but which does not simplify the process. The simplest method of overcoming the difficulty—an absolute necessity for prints not reversed—will, I think, in the future be found in the recent discovery of developing on celluloid—polished or matt, according to the nature of the prints required—and then backing up on the final support, which beside the fact of giving prints in their right position, *i. e.*, unreversed, cannot possibly make any difference to the print in any other way. This method, I believe, will also have additional advantages in protecting the print underneath it. It can be washed or cleaned at any time and will also render spotting easier.

There is only one real secret and difficulty in carbon printing—and nothing else that ordinary intelligence and skill cannot accomplish—that is to have soluble tissue, which cannot be obtained unless the conditions that make it a certainty are complied with. After sensitizing drying at a low temperature *without moisture* are the conditions for success; its disregard will always be met with failure. I have in my own experience never found this to fail, hence it follows if the conditions for success are not naturally present they must be artificially produced, otherwise success is hopeless. If any man, be he great or small, contradict this statement personally I have no use for him, and he should be dismissed as an admonitor and mentor. Nay, so important is this principle, generally skimmed over by our would-be instructors—and in the very nature of bichromated gelatine, carbon tissue (*vide* Eder's classical essay on the subject, should authority be required)—that I would lay particular stress on it, deducing other important corollaries for insurance of success in carbon printing, *i. e.*, in always having tissue of the right nature, that is to say, *soluble*, without which no prints can be obtained worthy of the name.

As heat and moisture are the two conditions that produce insolubility in carbon tissue, these having been excluded in drying must also be excluded afterward if the tissue is to be *kept soluble*. The ordinary methods recommended are well enough when these conditions, heat and moisture, are absent, but in their presence they are inadequate—one might at once say absolutely worthless—and recourse must be had to a chemically dried atmosphere, such as is used for preserving platinum papers from moisture. And here I may say that it is strange to me that carbon tissue has never been placed on the market by its manufacturers ready sensitized and sealed for use, just as platinum papers are. I have no doubt it will be done; the thing is perfectly feasible.

The only other difficulty in carbon printing is air bubbles, but ordinary precautions are sufficient to eliminate these. If soft water (rain-water) be used for the squeegeeing part of the process and also for developing, air bubbles need give very little trouble.

Thus, in a nut-shell, I have endeavored to place all the essentials of carbon printing. These recognized, the rest is easy and quite within the range of mortal brain.

## THE ADVENT OF NEGATIVE RETOUCHING IN AMERICA—HOW TO DO IT.

BY J. F. RYDER.

THE most important and first real improvement to the portrait photographer after the advent of collodion was retouching of negatives, which method of finish came to this country from Germany in 1868.

Dr. H. Vogel sent examples of this work to Edward L. Wilson, editor of the *Philadelphia Photographer*, and from him I secured a small collection. The pleasure I found in these little portraits which got their smooth, soft, and delicate finish

from the retouched plate was most gratifying.

The coarse skin texture, the pimple and freckle blemishes were converted into fine, soft complexions, most gratifying to the eye, and especially to the eye of the person represented in the picture. This was a phase of art wrought out by the patient German and but recently introduced by him, while in America it was unknown.

I expected it would be captured and introduced by some prominent New York photographer, as we look to that city to take the first bite at every pie coming from abroad. I was anxious it should so happen that I could take a later chance at securing it for my own practice.

The metropolis was tardy; I was impatient. I concluded to take the liberty of giving Cleveland a chance, and set about it.

Mr. Cyrenius Hall, an artist skilled in water-colors and India-ink work, who had been some years in my employ as a finisher of photographs, had gone to Germany to study more serious art. To him I wrote, telling him of my want, describing what I had seen, and asking him to secure for me a skilled artist in retouching.

He was successful in finding an excellent man—Herr Karl Leutgib, of the Munich Academy, who was desirous of coming to America. Mr. Hall soon closed a contract with and secured passage for him on the steamer Schmidt, for New York.

I had a friend to meet him at the steamer's dock, with photograph in hand, held aloft, standing by the bridge as he came ashore and see him safely on board the train for Cleveland. For reasons, I did not want him to loiter about New York or visit any photographic establishment in that city.

On his arrival in Cleveland we made him very welcome and comfortable, sounding no trumpets in his honor or in our exaltation. Very quietly we prepared a creditable display of the new work, selecting well-known citizens, among which were beautiful young ladies and children. These we exhibited with pride.

A decided impetus was given our business from the introduction of the new finish, and I soon imported two more artists.

In the spring of 1869 was to be held in Boston the first convention exhibition of the newly organized National Photographers' Association. For that event I made special preparation and took a carefully prepared collection of the "new finish" work, the first exhibited in America by an American photographer.

It was really the sensation of the exhibition, and created a very favorable impression. It caught like measles, and became epidemic. Now came a craze for

PHOTO.
*Fritz Luckhardt, Vienna.*
A print from the collection referred to in Mr. Ryder's paper on "Retouching."

retouching and retouchers. Great was the demand and meagre the supply.

The soft and delicate effect it gave appealed to all and pleased all. A method which made a person look finer and handsomer was welcome—a much desired and valuable improvement.

I had applications galore for instructions. I had come into a valuable adjunct to photography. I had secured it for myself. Good business policy did not suggest that I immediately open my hand and

give to my neighbors and friends what they surely would not have given me. So for a time I took no pupils. When I did it was as a courtesy, and never for pay. In an amiable way I tried to be helpful to friends, but never pledged myself to give complete, full instructions.

It was surprising to learn how many of my applicants could master the art in a week. Some were so confident of their ability they would only ask for an hour's teaching. How true—

"Fools rush in where angels fear to tread."

The facts are that the student for negative retouching needs some capital, to wit: A knowledge of art sufficient to enable him to draw a head from life, and do it well; a knowledge of photography sufficient to judge of the quality of the negative he is about to retouch. A person possessing the above qualifications may, with patience, judgment, and care, learn to become expert in this delicate work. It is, indeed, a rare and delicate work. The lightest hand and a light touch are required to give a soft effect. Where *not* to touch the plate is fine judgment; *how* to touch it is the best art.

To so retouch the plate as to make the print from it look as though a pencil had not touched it, but that it was a very perfect *un*retouched plate, is, to my idea, the acme of skill. In most faces is a surface texture which is precious. Let us look into the face of an elderly woman. There are lines made sacred by the drift of years, by sleepless nights over restless, tossing children, by anxieties of family cares, by the happenings of what makes up life, her thoughts, perhaps, following a son in the army of his country, upholding the dear old flag. In this motherly face these lines have been honestly earned; they are the heritage of an honorable life; they are records of unblemished, kindly character. Shall they be wiped out with a ruthless pencil in the hand of a $6 per week botch, self-styled "first-class artist?" No. Get thee back to the farm and behind a hoe; don't desecrate that dear old face.

Let a man who has a mother, who has consideration, who has skill, retouch that plate. He will soften and not exterminate the lines; he will soften and gently smooth the roughness so carefully as to make it seem a very sweet roughness.

The "mechanic" retoucher I am not in sympathy with. He will "sheet-lead" a face, covering the whole surface as unsympathetic as he would paint a floor, commencing in one corner of the room and spreading the entire surface. If he could retouch with a jack-plane he would do it. Some examples of his work look like a picked chicken before the pin-feathers were scorched off. Again his "real fine" efforts frequently make a face look like a distended bladder, or as though stung by a bumblebee after the swelling had taken effect, showing about as much expression as a hen's egg—I beg pardon of the conscientious, painstaking hen; I was thinking of the porcelain egg, without the pebbled surface grain which proclaims genuineness that characterizes real motherhood of an honest product.

So much have I seen in the past thirty years of the faults and abuses of negative retouching that I have condemned myself to shame for what I was formerly proud of.

Evolution brings us around face to face with what we have thought good and have been sure was bad, that we have a chance to find pleasure or discomfort and take our choice. I am glad to see that the extreme of bad retouch is hidden under something else.

---

A good photographic magazine will tell you the true value of new things, but a busy editor should not be snowed under with fool questions.

Remember that in cold weather solutions should be warmed and strong; in warm weather they should be cooled and diluted.

A fair person is usually best if printed in a warm tone; and a very delicate, lace-swathed form should be very lightly printed.

MOSAICS, 1901, is the only pictorial professional record of the past year, and it is a good one.

To *study* other people's photographs helps our photography; to study their pictures cultivates our art side.

# THE STRENGTH AND USE OF SOLUTIONS.

BY C. WELBORNE PIPER.

A SOLUTION, whether made by weight, by volume, or by weight and volume, may be described as containing either a certain percentage of the ingredient or as containing so many parts by weight or volume of the ingredient in so many parts by weight or volume of solution. The former is its percentage strength, the latter its rational strength. In practice we are compelled to use solutions of various odd and fractional strengths, but the "stock" solutions from which such "working" solutions are made up should always be of simple integral strength; for while it is always easy to make a solution of intricate strength from a stock solution of simple strength, the converse operation is likely to be very difficult. It is very important that stock solutions should be made of convenient strengths, and in the making of such solutions the following are very desirable principles to observe:

With metric standard measures a stock solution should always be of integral percentage strength; its rational strength should be integral when the quantity of the principal ingredient is taken as a unit; therefore, all integers should be divisible into 100. This rule permits the use of the following stock solutions:

| *Percentage strength.* | | *Rational strength.* | | |
|---|---|---|---|---|
| 1 | per cent. | 1 | in | 100 |
| 2 | " | 1 | " | 50 |
| 4 | " | 1 | " | 25 |
| 5 | " | 1 | " | 20 |
| 10 | " | 1 | " | 10 |
| 20 | " | 1 | " | 5 |
| 25 | " | 1 | " | 4 |
| 50 | " | 1 | " | 2 |
| 100 | " | 1 | " | 1 |

It prohibits solutions such as 3 per cent., or 1 in 33⅓; 30 per cent., or 1 in 3⅓; 40 per cent., or 1 in 2½; but only as stock solutions. There is no objection to the employment of these strengths in "reserve" solutions from which the stock solutions can be replenished. If we use large quantities of any particular stock solution it is convenient to keep, if possible, a reserve solution of, say, double or triple strength. Thus a 20 per cent. solution may be easily replenished from a double strength or 40 per cent. reserve solution; or from a triple strength, or 60 per cent. solution, if such can be made.

If the nominal units of the grain and minim are employed the rational strength of a stock solution should be integral when the quantity of the principal ingredient is taken as a unit, and all integers should be divisible into 60.

This rule permits the use of the following stock solutions:

| *Rational strength.* | *Grains per dram.* | *Grains per ounce.* | *Percentage.* |
|---|---|---|---|
| 1 in 60 | 1 | 8 | — |
| 1 " 30 | 2 | 16 | — |
| 1 " 20 | 3 | 24 | 5 per cent. |
| 1 " 15 | 4 | 32 | — |
| 1 " 12 | 5 | 40 | — |
| 1 " 10 | 6 | 48 | 10 " |
| 1 " 6 | 10 | 80 | — |
| 1 " 5 | 12 | 96 | 20 " |
| 1 " 4 | 15 | 120 | 25 " |
| 1 " 3 | 20 | 160 | — " |
| 1 " 2 | 30 | 240 | 50 " |
| 1 " 1 | 60 | 480 | 100 " |

All these solutions are convenient if we use them solely as solutions of rational strength, but if we wish also to use them as percentage solutions, then only those represented in the last column are adaptable. With the metric measures all solutions of convenient rational strength are also of convenient percentage strength, but this is not the case with English measures.

If English standard units are used, as there is only the one pair of units, it is inconvenient to consider the rational strength of a solution, excepting when the principal ingredient is required to be used by the ounce or the solution to be used by the pint. For example, a 10 per cent. standard solution of hypo may be conveniently considered to be of the rational strength of two ounces to the pint, but with small quantities of weak solutions we must keep to percentages. It is best, as a rule, to use standard solutions only with metric measures and to adopt only the nominal units of the grain and minim with English measures. The avoirdupois ounce may, in fact, be dropped altogether in considering the use of solutions, though it is at times useful in making up stock solutions in large quan-

tities, either for use with the metric units or with the English nominal units. In the former case we simply use the avoirdupois and fluidounce in place of the gramme and cubic centimetre. In the latter case we can work by the following table of equivalents, which gives in avoirdupois and fluidounces a series of stock solutions of convenient rational strengths by nominal weight and volume:

| *Rational strength.* | *One oz. avoir. in water to make* |
|---|---|
| 1 in 60 | 54 oz. 5 dr. 30 minims. |
| 1 " 30 | 27 " 2 " 45 " |
| 1 " 20 | 18 " 1 " 50 " |
| 1 " 15 | 13 " 5 " 22½ " |
| 1 " 12 | 10 " 7 " 30 " |
| 1 " 10 | 9 " 0 " 55 " |
| 1 " 6 | 5 " 3 " 45 " |
| 1 " 5 | 4 " 4 " 27½ " |
| 1 " 4 | 3 " 5 " 10 " |
| 1 " 3 | 2 " 5 " 52½ " |
| 1 " 2 | 1 " 6 " 35 " |
| 1 " 1 | — " 7 " 17½ " |

Reserve solutions of double, triple, or quadruple strength can, of course, be provided with any system of measures. To make a reserve solution we simply either take double, triple, or quadruple weights of the solid, or make up the total volume to only one-half, one-third, or one-quarter the bulk of a solution of normal stock strength. Thus, if we want a 60 per cent. or 3 in 5 reserve solution of hypo for the purpose of supplying a 20 per cent. stock or 1 in 5 solution; instead of dissolving, say, 3 parts of hypo in water to make 15, we can either dissolve 9 parts in water to make 15 or 3 parts in water to make 5. If then we take 1 part by volume of the reserve solution and add 2 parts of water, so as to triple the bulk, we have a solution of the strength of 20 per cent., or 1 in 5.

This method of converting a strong reserve solution into a weaker stock solution illustrates a mode of producing a dilute solution that may be styled the method of proportionate dilution. This is the first method to be considered, but it must be pointed out that though it is a very easy mode of replenishing a stock solution from a reserve solution, it is not always, or even often, a convenient method of diluting a stock solution down to a working strength, in spite of the fact that it is the method almost universally prescribed in developing formulæ.

In these formulæ we have two or more stock solutions which have to be mixed to produce the developer. This mixing of two solutions involves the dilution of one by the other. Thus supposing one to be a 2 per cent. solution of pyro and the other a 16 per cent. solution of soda, a mixture of equal parts of each contains 1 per cent. of pyro and 8 per cent. of soda, each portion being doubled in bulk by the addition of the other. If, then, we again double the bulk by adding two parts of water we have a solution containing ½ per cent. of pyro and 4 per cent. of soda, which is a normal pyro-soda developer.

This is an ordinary example of the method of mixing a developer by proportionate dilution, and a very little consideration will show its disadvantages. First, we must have a 16 per cent. stock solution of soda to produce a 4 per cent. solution as the result of dilution in the proportion of 1 to 4; but a 16 per cent. stock solution is of a very inconvenient strength for other purposes, and the employment of several different developers, all to be mixed by proportionate dilution, will necessitate the provision of a separate stock soda solution for each. Further, even if we use only one developer, we can easily modify it in an intelligent fashion. Suppose we want to use ½ per cent. of pyro with 5 per cent. of soda. The stock solution of pyro must still be diluted in the ratio of 1 to 4, but the soda solution in the ratio of 16 to 5, a process which lends itself to probable blunders. The formula may tell you to use, under certain conditions, "a little more soda" solution, a haphazard procedure that has no good features, but which is likely to be adopted by reason of the trouble involved in the use of the inconvenient 16 per cent. solution. If we drop the system of proportional dilution we can keep stock solutions of generally convenient strength, which can be used with equal facility either for the purpose of mixing a developer of normal strength or of making one of different but definite strength. The method of using such stock solutions differs according as we consider the percentage or the rational strength of the working solutions, and also as we require to make up a definite or an indefinite total quantity of solution.—*Amateur Photographer* (London).

## AN EXHIBITION OF HISTORICAL NEGATIVES.

On the evening of March 8th, Mr. W. I. Scandlin, editor of Anthony's *Bulletin*, gave an interesting exhibition of historical negatives of New York City and environs before the New York Genealogical and Biographical Society. The collection of views shown by Mr. Scandlin embraced some forty-five scenes in and about New York during the years 1851–57. The negatives from which these views were made are waxed-paper negatives by the process invented by Le Gray, introduced into this country by Victor Prevost.

With the exception of a few negatives of small size dated 1847, which are preserved in the Harvard Library, Cambridge, Mass., this collection of negatives is unique in the history of photography in America. Apart from this they have unusual interest as depicting scenes in and about New York as they existed years ago.

For many years these negatives were in the possession of Mr. John Rosch, of White Plains, N. Y. Previously they had belonged to a friend of Mr. Rosch's who, in the early fifties, conducted a private school in New York, in which school Victor Prevost was a teacher of drawing and painting. Prevost was also a photographer of considerable skill and at one time was associated with Mr. P. C. Duchochois, their studio being on Broadway between Houston and Bleeker Streets. This was in 1853.

Among the slides shown by Mr. Scandlin were a portrait of Victor Prevost; a view of Battery Place, showing Trinity and St. Paul Churches; interior and exterior views of Castle Garden, formerly Castle Clinton, where Jenny Lind made her first appearance in this country, under the auspices of Mr. P. T. Barnum, in 1850; a view of Broadway near Fulton street, negative signed and dated 1854; two views of Columbia College, on the old site of Kings College; view of Park Place near Broadway; another view of Broadway near Leonard Street, showing the Daguerrean studio of Mr. J. G. Gurney and the old home of the American Institute; three views of Broadway near Franklin street, showing Root's and Brady's galleries; an early view of Grace Church, showing the wooden spire, and the Marble Yard on the corner of Tenth and Broadway, 1854; together with several views along the Hudson and in the vicinity of Boonton, N. J.

The lecture accompanying the slides was listened to with enthusiastic attention by a very large company. It is seldom that New Yorkers have such an opportunity of seeing views of the city dating so far back, and the privilege was evidently appreciated. The value of such a collection would be difficult to estimate as forming an authentic record of the appearance of the city at the time of its making. It would seem highly desirable that the negatives should find a permanent home with some of our historical societies in order that their preservation intact might be assured. Information concerning the collection may be had from Mr. Scandlin.

## COMMON IMPURITIES IN WATER.

BY A DARK-ROOM MAN.

Although, as a general rule, water which is sufficiently pure for drinking is pure enough for most photographic purposes, yet there are cases where the water-supply of even large cities is so far from clear that it is not safe to use it even for washing plates, much less for mixing solutions. Such instances that suggest themselves are St. Louis, and in summer time the "Croton" water of New York. These impurities are tangible and real—mere fragments of earth, weeds, and similar matter suspended in the water—and the obvious remedy is a rough-and-ready filtering arrangement.

Rain water is commonly recommended as suitable for solution mixing. This water is free from those "hardening" substances which are often found in water drawn from or which has soaked through the ground. Ice water, too, is suggested, and mainly because ice, by forming first on the surface

of water, is liable to be free from suspended matter, which has a tendency to sink, and so will be more abundant nearer the bottom of the well or stream. As one of the common impurities of water is air, it will be seen that neither rain nor ice water are by any means chemically pure.

There are many impurities which may be found in water, but two of them—other than mere suspended matter, which is easily guarded against—occurring very commonly are air and carbonate of lime. Air is slightly soluble in water, and as air contains much oxygen, such water is very unsuitable for use with pyro or sulphite, both of which substances have a strong tendency to oxidize. As a comparison mix half a bottle of pyro solution, using water which has been well shaken to mix air into it, and make up a similar solution, but with water chemically pure. Cork each tightly in a separate bottle, and in less than a day one will be colored and useless, while the other will remain colorless for days. When the latter does begin to color by contact with the oxygen of the air a discolored film will first form over the surface of the liquid and gradually penetrate deeper.

Carbonate of lime is the usual cause of hard water. Strictly speaking, carbonate of lime is not soluble in water, but it is soluble in water containing carbonic-acid gas; and when carbonate of lime is present the water contrives to imbibe the necessary gas. Fortunately one simple remedy will rid us of both air and lime; the remedy is to boil the water. Both air and carbonic-acid gas are driven from water by boiling, and as water without the latter gas will not combine with lime the latter is got rid of by precipitation. We all know the fur or scale which forms in kettles where hard water is used; it is the precipitated carbonate of lime.

It will be obvious that, though the lime is permanently got rid of, air may easily be re-absorbed by the purified water. To shake a bottle well, to hasten the mixing of a solution, is sufficient to undo all the work by recharging the water with air. Such solutions should, therefore, be in some way mixed without violent shaking.

It is often difficult (and unnecessary) to be scientifically correct, but in the case of photography two simple precautions are in most instances sufficient. If the washing water is not sufficiently clear let it be filtered. A few thicknesses of coarse cloth may be sufficient and without checking the flow of water. For solutions the equally simple remedy is to boil the water, and cool it shortly before using. If the water is used as soon as it is sufficiently cool it will not have absorbed any more air.

## THE JOURNALISTIC INSTINCT.

SOME weeks ago we received from New Zealand a copy of the Christmas number of the Christchurch *Weekly Press*, a newspaper which has fairly earned a world-wide reputation among journalists for its live, go-ahead spirit. Close on the heels of this issue comes another special number—a jubilee number. From it we learn that just fifty years ago four emigrant ships sailed from England to found what is now a prosperous section of a great colony. What is of special interest to us as photographers is the lavish use of half-tones in this paper. As befits a jubilee number, there are many, many portraits of old and leading inhabitants, and, including these, there are 770 illustrations in the paper. Much of the photographic interest of the issue is due to one Dr. Barker, who, landing with the first batch of emigrants in 1850, appears to have been an enthusiastic and successful photographer for at least forty years. To the New Zealander these old-time records must be intensely interesting, but to we outsiders the work of Walter Burke and others appearing in the Christmas number appeals more strongly.

In this issue Mr. Burke has some eighty illustrations, and they are of value in showing how fully he is imbued with the *journalistic instinct*—a very real thing which is only too seldom exhibited, but which is possessed by some people who are not aware of their treasure.

It has been well said that the truest history is in the lives of the people, and not in their rulers or their wars. How jealously we lay hold of any scrap of informa-

tion which tells us how our forefathers lived and worked. Walter Burke has this faculty of recording every-day objects in a manner instructive and interesting.

How often an editor receives a letter from some aspirant who wishes to supply copy or illustrations and who says, "Please tell me what subjects would be required." Such is not the way to success. To succeed, the picture or the copy must be sent to the editor and be such as to make him say "Good! just what I want." Some men can do it nine times out of ten.

Walter Burke is in a country in many ways similar to much of the Middle West and the Pacific Coast—fifty years ago there were but few pioneers, and "original inhabitants" may still be found. And as he goes with his camera he gives us relics of the past, incidents of the present, glimpses of the life of the country, its scenery, its progress, its wealth.

To every picture he appends a title or a description; it may be a dozen pithy words or it may be a terse paragraph, full of information. Here is a picture of an old iron pot half sunk in the sand of the shore —surely a curious subject to be recorded, but it is a note that in the "prehistoric" days of seventy or eighty years ago whalers used to bring their spoil to the shore and in these great pots boil the blubber to oil. True journalistic instinct to see and seize the possibility for a picture and paragraph in such a subject! New Zealand is a great sheep-breeding country. We get an idea of the immensity of the industry as we see hillsides hidden under moving woolly masses. We see the sheep being counted and branded and washed. We see the machinery handling dead, frozen carcasses and the mutton loaded on ship for European markets. We see the great jets of water smashing down rock in hydraulic gold mining, and beside it we see the primitive cradle of the pioneers as men to-day wash over the tailings of old mines and earn therefrom a steady living. We see the free horseback life of a young, open country, we see the railway pushing into new parts, and we see the wonder and vastness of the virgin scenery. Walter Burke has succeeded in his task, for none can lay down this result of his work without a boyish desire to run away to New Zealand. If any country or colony could flood an European country with a few million such seductive records as this antipodean Christmas number it would find that the tide of immigration was deflected in its favor.

A chapter on the journalistic instinct is not out of place in the pages of a professional magazine, for scores of people are altogether or in part earning a living as journalist-photographers, and in the majority of cases they are recruited from the amateur ranks. The camera for some years has been an adjunct to the journalist; it may now be termed a necessity. And the journalist usually learns photography in his characteristic way. He buys a camera and puts in a few weeks, day and night, trying to master the thing; and six weeks after he has got it he goes to the Philippines or to South Africa (or it may be just down-town), and he makes his exposures and develops his plates under a blanket at night, with a few compressed chemicals and a bucket of water. His first results may not be first-rate, but they are authentic, and he improves as he gains experience.

Let those who have ever attempted work for the press without much success, and who hanker after it, look through the weekly illustrated magazines that make a specialty of photographs. See what is used and judge what is required. The average man has an uphill task in submitting interesting photographs, but the man who has the knack (or the head) to choose what the editor really wants will find that same editor ready to receive him with open arms.

---

*To Remove Silver Stains from Negatives.* Make up a solution of two ounces of hypo, five grains of sodium phosphate, and a quarter of an ounce of lead nitrate in six ounces of water; then add a quarter of an ounce of alum, after which put the bath on one side to clear before using. This is really a sulphur toning bath, and the action seems to be to tone the silver stain in the negative right away.

1 cubic centimetre (c.c.) is equal to nearly 17 minims, and 28¼ c.c. equal to one ounce avoirdupois; 1 gramme is equal to about 15½ grains.

# ENLARGED NEGATIVES.

BY SIR WILLIAM ABNEY.

THE season of winter is for many photographers a time when they regard their outdoor work as postponed for the time being. The enthusiastic worker will still be keen to keep his hand in on some process or another which, by its indoor nature, is more suitable for the darker months. No doubt the majority of such photographers have been content with snap-shots, say, quarter-plate size, and some may be anxious to reproduce some few for distribution, the remainder being left as precious recollections of an agreeable outing and of "no particular value to anyone but the owner." The dozen or so plates which may be artistic, or of more than passing interest, the amateur may not be content to leave of the original size, but may be anxious to have negatives by him from which large prints, as good as the original and perhaps better, can be reproduced.

The question is how these negatives shall be made. It is almost axiomatic that no satisfactory negative can be taken in which one operation, at all events, is not a printing operation—that is, the transparency or the reproduced negative must be a print, printed out and not developed. There are various reasons for this axiom which those who have gone to the trouble of measuring densities of the deposit may satisfy themselves about. If this be the case it may be well to consider the plans which may be expected to give successful results.

The degree to which the enlargement is to be carried has something to say to the exact details. If a negative be taken with an old-fashioned lens, for instance, with a large stop, its definition at the edges of the plate may not be as good as in the centre, and if the hands that held the camera when the snap-shot was taken have not been practically without movement any enlargement taken in the ordinary way would not be artistically of value if its dimensions were of any large size.

As before stated, one of the best methods for artistic enlargements is by producing on a plate of the size required a fully exposed transparency which will show every detail by transmitted light, and have a density in the most dense parts that will shield a sensitive paper for printing from any coloration when the bare glass prints to the deepest shade. Taking an albumenized paper print from such a transparency will give a negative which, when simply fixed and washed, can be used for producing prints giving great delicacy of tone and none of that excessive contrast which is so generally seen when a negative is taken in the camera from the transparency. Light margins to dark parts are often seen when a negative is taken by other means than by contact, due partly to diffraction phenomena. They may be seen sometimes to a limited extent in a transparency, but they will be found to be more pronounced in a negative.

For amateurs who wish to produce a negative of the size of, say, 17 x 26, the manipulation of a plate of such dimensions would be prohibitory, but the manipulation of a sheet of paper of that size for producing an enlargement on bromide is not difficult if carried out in the way that the writer works, as described in an article a few months back. It also allows the print to be "improved" by shading parts of the image while the manipulator is inside his camera. This method, then, is one which can be adopted to produce the required transparency. An enlarged print of, say, 7 x 9, is first produced as a trial. The parts requiring shading are noted, and when a small, harmonious print is produced the larger sizes can be manipulated in the same manner. Slightly more exposure than that necessary to produce a print is given to it, in order that when examined by transmitted light the details in the shadows are all visible and well marked. The surface is then rendered translucent with castor oil, as laid down by the old Eastman Company for paper negatives, or it may be waxed by the usual method of applying wax with a hot iron, and we then have a positive from which the negative is to be made. The writer has not tried the stripping films, but it is quite possible that such could be used and the gelatine image laid down on a sheet of glass. If these be

available the grain of the paper would be entirely absent.

The manufacture of the negative may be done either on albumenized paper or platinotype. The albumenized paper is often a little irregular in its texture and most irregular in its color. It requires no toning, and should be fixed immediately after printing and then be waxed. The image is a yellowish-red and transmits much less photographic than light rays, so that a comparatively feeble image will give a satisfactory print; but it is this uncertainty which is distasteful, and it may be abandoned for a platinum print. Those who have tried it may know what beautiful transparencies ordinary platinum prints make. As a rule, the ordinary paper will suffice, though the scale of gradation is rather more rapid with it than with the albumenized paper or the P.O.P. Still there is sufficient range to give a good scale, and all that is really essential is to see that there is proper density in the transparency to secure the whole value of the original negative. This negative is, of course, also made translucent, and the grain of the paper does not interfere with the print when it is of a large size; in fact, artistically, it is a great improvement, and it hides in a measure any small want of definition in the original negative. As we write we have an Alpine photograph before us in which blocks of ice are decidedly not very well defined in the original negative. In the enlarged print this is not noticeable, as the roughness of the paper and the grain render it less conspicuous.

If a negative is produced by this plan no retouching is required, any improvement being done on the transparency by shading. In some views which have been treated in this way the proper balance between the sky and landscape has been attained, clouds which would ordinarily be scarcely marked attaining their proper values. In case of cloudless skies which might print white in the original the addition of clouds can be made in the reproduced negative by careful double printing, and there is not the same difficulty experienced in making two prints alike which there is under ordinary circumstances where cloud negatives are brought into use.

Rough, toned bromide paper between the negative and the print can be very well employed, with the result that a very fine mezzotint appearance is given to the picture. These remarks may be supposed to indicate that the writer has deserted from his attachment to glass or other transparent media for the production of negatives. This is not the case. His admiration, however, for the old paper negatives of large size, which were introduced by Fox Talbot, still remains. They are unsuitable for small work, but for large work they are nearly unapproachable as regards artistic properties.

The great command that the operator had over every part of his negative by use of the brush development allowed him to exercise his artistic instincts. In the present process he has the same advantage in producing the transparency, for while he stands in his camera he can use the light itself to get the effects which the different strengths of developer had to do in those days.—*Photography.*

## CLOUDS.

BY PATRICK SAGAR.

PERHAPS no fashion has more completely gone out of the repertoire of pictorial photographs—professional or amateur—than that of blank paper skies. Everybody prints clouds above their landscapes and almost everybody does it badly. In nature or in a colored painting the beauties of tint—beyond the reach of photography—often give to the sky sufficient beauty and importance to make it a feature, often the feature of a scene. In photography, except very rarely, the sky should be there not so much for its own beauty as for toning down the harsh whiteness of the usual photographic article. Too often the fault of the sky is that it is deliberately printed in to compete with the landscape, to share equally with it the importance of

the picture. To make a really good skypiece is very difficult; to make a commonplace combination picture is very, very easy.

The obtaining of clouds on the same negative as the landscape should be more considered than it usually is. All who use a hand camera for distance shots at a time when clouds are about know that the clouds are often seen during development. More especially is this the case when work is done along the seashore or among mountains where the air is clear. These clouds usually disappear during development, but it is not difficult to retain them when desirable. It cannot be too emphatically stated that clouds as such are not necessarily an advantage in pictures, but the proper clouds are almost essential to the attaining of the best results. In the case of all on one negative, suggested on the theory that the clouds should be slight and restrained, a little care in development will be all that is required. Development may be commenced with a restrained developer, and when the sky appears check it by going over it with a brush charged with bromide; or, inversely, after changing the developer for one less restrained the dish may be tilted to flow the developer away from the sky and keep it actually moving over the foreground. The greatest advantage of this system is that the clouds are always true to life as far as position and elevation and lighting are concerned. Too often the use of stock cloud negatives is extremely bad. The policy of repeating one cloud in many views is equally wrong in theory and practice. One of the most important but least noticed of mistakes is the absolute lack of any values rendering distances. In a photograph in which the distance melts into sky there should be much atmosphere. Edward Dunmore points out this defect. The greatest falling off in the majority of photographs that possess well-rendered clouds is absolute want of atmosphere in the landscape; the distances instead of merging nicely into the sky are hard and sharp cut, with no feeling of harmony about them. The lights and shadows of a distance, even on the clearest day, are always many degrees less prominent than those of the foreground, even if well defined; and when rendered devoid of atmosphere, as in many—I might say most—photographs with good clouds taken on orthochromatic plates with a screen are untrue to nature. So difficult is it to get the best effects in both cloud and landscape on one plate that printing in clouds from a separate negative is generally the best plan from both artistic or technical stand-points. In this case there is no compromise required; the clouds are taken with reference only to themselves and the landscape also to itself, so we get the best results on each. Let alone this it rarely happens that clouds arrange themselves in the best position for the composition of the subject; they may occasionally do so, but it is a rare occurrence. We cannot afford to neglect the value of a properly placed cloud, which will make an uninteresting subject into an interesting one and a bare strip of ground into an attractive picture.

If we carefully examine the works of many of our leading landscape painters we shall soon see the value of artistically arranged clouds. In all probability few of those clouds were in existence at the time and in the position represented when the landscape was painted. A dark or a light cloud may vastly enhance the value of lights and shadows on the ground by contrast or harmony, binding the subject together into a compact, satisfying whole, and adding to that feeling of space and atmosphere that a blank space or unsuitable clouds never do. The study of clouds is, moreover, interesting in itself; it will soon be noticed that some special form of cloud is peculiar to certain kinds of country or locality and absent in others. Flat, marshy districts are canopied by quite distinct shape of clouds to those of hilly, mountainous regions. Again, clouds over or near to thickly built-over districts are different to those of the more sparsely populated country. Smoke has a modifying influence not only on the color but on the shape of the clouds, as also have wide expanses of marshy ground. The stratus cloud is a formation of vapor much more prevalent over water—as the mouths of rivers and sea—than more inland. The cirrus cloud forms at a much greater elevation and may be noticed in any district. I do not think anything can exceed in beauty a grand display of cumu-

lus and stratus clouds; although the cumulus cloud is of itself the most beautiful, it is not always the most suitable for addition to a landscape, nor are clouds taken with the sun behind them. They may be more effective as clouds, but less in harmony with the scene. There are many landscapes in which skies seldom appear, and there are times when skies should not be printed in. Very often a little sunning down is more in place than an aggressive cloud.

## GENRE PORTRAITURE.

We have several firms who are making a specialty of what are called "art studies;" usually interiors, with several more or less awkwardly posed figures, and intended to represent some sentimental subject. These pictures are of varying degrees of merit, but, for the most part, they are palpable failures, except presumably from the selling point of view.

Possibly there is no opening for a large business success on these, on but superior lines probably there is; but there certainly is a remunerative business for a man of the right temperament, for it is possible to turn out pleasing studies—gems in composition, perfect in conception, perfect in technique.

There is nothing on which the fraternity can be more heartily congratulated than on its escape from the old-fashioned background; but certain it is, art question notwithstanding, that sooner or later fashion will rebel against the plain or graduated ground, and some change will inevitably come. Our present suggestion will not meet a *wide* demand for backgrounds or accessories, but it will prove useful to the individual—to the man who gives an especial attention to every individual print. Carefully worked out *pictures* would, however, be more unqualifiedly successful than portraiture, for it would allow the choice of a suitable model. Rustic or working people—farmers, miners, fishermen—there is no lack of choice of picturesque working folk. The method suggested here was first elaborated, we believe, by Thomas Edge, a Welshman, and we give the description of his methods in part from particulars published some years ago by Edward Dunmore. Edge did some of his best work forty years ago, but many pictures from his studio at that time not only bear favorable comparison with the work of the present day, but we question if any modern work of an approximate kind is anything like so good. Some of the finest he issued were most charming compositions—perfect gems in miniature. Suitable models were selected in their every-day costumes, without any attempt at theatrical effect, and the working classes of the north of England and Wales left little to desire in "make-up," provided an intelligent model could be secured. The accessories were ready to hand, and there is no question whatever but they received masterly treatment. Most of the subjects were rustic, lending themselves better to pictorial compositions than other kinds, Mr. Edge's dominant idea being always to produce a *picture*.

His method was the old one of double printing; but by using care, intelligence, and a true artistic feeling he absolutely removed his work from the weak or the commonplace. His "backgrounds" were natural, his foregrounds manufactured; but in any of his pictures it is impossible to trace the slightest suggestion of the studio. Either interior or outdoor backgrounds may be used; thin, quick-printing ones, not including any near foreground, as this portion of the picture is taken *with* the figure. Near middle distance and distance are all that are required for the work. It will be presently seen that the size of the landscape or interior negative is immaterial so long as it is sufficiently large. This remark, of course, applies to the actual size of the plate or film, not to the subject on it. A suitable bit may be selected from a large negative, often with advantage.

The figure negative is taken with a plain, graduated background, the foreground being built up in the studio. A solid bank of earth and stones was made by Edge, some six feet in front of the background, across the studio; plants and grasses were grown in it, and not kept in

flower-pots, like the usual studio greenery. By allowing suitable foliage plants to grow *in situ* under natural conditions, a much better effect was obtained; in fact, all the accessories were *solid and real*, and were veritable bits of natural landscape. A portion of the bank represented a pathway, so that the whole of the figure, including the boots, could be shown if desired, or the model, by stepping a little to one side or the other, grass or foliage might obscure the lower portions of it at discretion. The form of the bank facilitated this. Water was contained in a shallow zinc tray, into which pebbles and sand had been introduced. Real bowlders were used, no *papier-mâché* imitations being tolerated; a few boxes containing grasses, etc., similar to those growing on the bank, and a few stones were all that were required to give variety, as the length of the bank, permitting the figures to move to the right or left, was sufficient to vary the small portion of foreground taken with each figure. Special subjects might occasionally require more alteration, but this was sufficient for ordinary work and gave a realistic effect that a mere imitation of foreground could never do.

A shaded plain background was fixed a couple of yards behind and inclined forward at the top, graduated from a deep gray at the bottom to a pearly gray at the top, the colors used being pure black and white ordinary oil-paint in varying proportions. The inclination of the surface avoided reflections, its distance from the subject putting it quite out of focus, with the result of a wonderful atmospheric effect unobtainable with a background fixed upright and nearer the subject. When in printing the landscape was superposed on this gradation tint it caused the foreground to melt into the distance with the utmost harmony and in the most natural manner possible; the illusion was perfect. If clouds only were added the same realism and naturalness was obtained, defying the strictest examination to detect it as a made-up picture.

The illumination of the subject was identical with that used for ordinary portraiture in the same studio. There was a great flood of light, modified by blue gauze curtains, chiefly top and front side light, owing in a great measure to the form of the studio, which was wedge-shaped, the background being at the thick end and the camera placed in a dark or unglazed portion at the thin edge of the wedge. With the exception of occasionally regulating the curtains at the side, the lighting was right for the greater number of subjects without alteration.

Although those were the wet-collodion days, a good deal of the work was done without head rests. A flap shutter was the kind adopted and three or four seconds the average exposure with grown-up models, no sitters being taken if the exposure was estimated to exceed fifteen seconds, that being the length of time Mr. Edge considered a person could retain a proper, unstrained expression. In those days this was considered a fairly rapid exposure. Often the expression is better rendered by a few seconds' time than by the fractional parts of a second; the first stiffness of enforced quietude generally disappears in a second or two. The prevailing idea is to get the exposure before the sitter is aware of it; it may be done sometimes, but, as a rule, the intelligent sitter knows all about it perfectly well.

The negative being developed and finished, we have a picture with a brilliant foreground and the figure boldly relieved against a textureless gray background, which, owing to the shading, has a particularly atmospheric effect. A mask has now to be made that will exactly cover the *figure* and *lighter* parts of the foreground wherever it is necessary to retain its purity. Mr. Edge's plan was to lay over the print a piece of plain thin glass and paint over all those parts on this cover glass that required shading with black varnish. This, of course, necessitated considerable care, so that there should be no overlapping on the one hand or underlapping on the other, either of which would be fatal to the effect.

A landscape or interior negative being selected, the print was in combination with the mask, to which it was attached by gummed paper, placed on the most suitable portion of it, filled in, and put to print at the bottom of a deep box, so that only parallel rays of light could get to it, in order to prevent any shadow being cast

by the mask in places where it would prove a defect by making either a dark or light line around the figures. This plan was afterward modified by painting on the print itself all those portions to be protected with thick gamboge yellow, which washed off in the washing water without leaving any trace of color; this simplified matters considerably, as the printing could be done without any extra precautions and in any light—the chief care was not to print the background too deeply, keeping the whole nicely atmospheric, and somewhat suggestive in effect, the foreground being already provided on the figure negative with proper brilliancy. Interior backgrounds were put in on exactly the same principle, the foregrounds in this case being made in accordance. The portraits were taken in the ordinary studio, with a plain light background.

In the foregoing remarks the process of producing the highest class of work has been described. Sometimes we may have a negative, not taken expressly for the purpose, that we should like to print in a similar manner. The nearest approach to it is, in the first place, to carefully paint out the whole of the existing background, and everything else not required to show in the finished print, with black varnish or opaque paint; this leaves the print with a perfectly white background that if left will prevent any good results in the second printing. Therefore, to get an approach to harmony after masking the print, it must be shaded down with a graduated tint deeper toward the lower part before putting it on the landscape or interior to be introduced. The results are, however, much inferior, and are at best a makeshift, although the plan succeeds somewhat better for interiors than landscapes, as such require somewhat rather less delicate treatment. Usually an interior is printed deeper than an open-air view; very much, however, depends on the artistic ability with which the whole thing is managed, a good result fully repaying the extra trouble of preparation.

Edge was, as we have said, an artist. As business grew the commercial side thrust his loved picture-making to the background; but with increasing age and failing eyesight he withdrew from active business, and unable to see genuine landscapes he busied himself by building up artificial scenes in miniature, using bits of cork and pebbles, mosses, and sea-weeds. When he attained his wished-for model he photographed it and made many pleasing pictures.

There is room for a man who will continue Edge's work, and there is adequate remuneration for him if he is a business man.

## PYRO.

BY JEX BARDWELL.

I CANNOT do better than quote the following from page 549 of the *Photo-Miniature*, No. 11:

"The oxidation of pyro in solution, which is responsible for its staining qualities, is prevented by the addition of a preservative to the solution.

"The popularity of pyro is due to the fact that it is a powerful developer which is easily controllable and which can be adjusted to the most variable conditions of exposure; for instance, it will do its work and do it well, with additions of alkali or bromide or water, such as would render many other developments quite useless, and it gives a negative of fine printing quality. Under normal conditions it oxidizes so rapidly that it can only be used once, but it *can* be made up so that it may be used repeatedly, and, in spite of the 'fresh solution every time' disadvantage, pyro is an economical developer, capable of doing all that any other developer will do, claims to the contrary notwithstanding."

This covers the ground so completely that it is worthy of the consideration of every photographer, especially the amateur, and the following remarks are the results of my own observation and experience.

The object of making a negative is to obtain a print or transparency, and it must be

evident that the more perfect the negative the more perfect the result.

The cost of a developer should not be taken into consideration, for if one gives a better negative than another it is the cheapest in the end.

In my remarks I do not wish it to be understood that I am condemning the use of any of the new developers, for they do all that is claimed for them. Each one has some peculiarity of its own that renders it valuable in producing certain results, no result, however, but can be produced by pyro (the development of positives on paper excepted).

One great complaint against pyro is its staining properties. This, however, can be entirely prevented if it is so desired; but I claim that this staining, if under proper control, is one of its most valuable points. This stain, when under control, follows the density of the negative; that is, in the high light it is heavy, getting lighter as it goes down until it reaches bare glass, where there is no stain at all. This gives the peculiar color to the pyro negative that makes it so excellent a printer. This coloration is controlled by the quantity of sulphite used. An excess of sulphite will give a gray and somewhat feeble negative; a pyro-soda developer without sulphite gives an excess of stain; a normal developer, such as the pyro-acetone, on page 556, of the *Photo-Miniature*, No. 11, gives a good color and can be recommended for any class of negative or transferring work. The formula can be modified to any extent desired; it is a good, clean developer.

Use your pyro dry, C. P. sulphite *sure*, C. P. acetone, water that has been boiled, and 10 per cent. solution bromide of potassium, and with these you can do all that any other developer can possibly do with the exception of using the same solution for a number of plates and the development of paper prints.

In development with pyro the solution on the plate should be kept in motion. I have never had any trouble in using pyro during cold weather.

Don't buy any chemical because it is offered to you cheap. The sulphite sold at the corner drug-store is seldom pure. C. P. chemicals may cost more, but they are the cheapest in the result. Take one ounce of C. P. sulphite, place in a mortar with four ounces of water, rubbed until dissolved, and you have five ounces of saturated solution, probably sufficient to develop an amateur's day's work. Never use water warmer than 90° F. to dissolve the sulphite. Some brands of plates require a little more and some a little less sulphite to give a good color to the negative.

Pyro gives a continuous deposit more in the nature of a stain than granular, and is valuable on that account for very fine work, such as photomicrography, and no other developer except glycin will approach it in this respect. Pyro-acetone will remain clear longer than pyro-soda or potash. If used for transparencies do not modify the developer to suit the exposure, but expose to meet the requirements of the developer used.

Acetone C. P. is neutral; it has a tendency to harden the film; "it gives with normal exposure a brownish-gray negative, does not soften or frill the film and is practically stainless," and is one of the best developers for lantern slides.

## ORTHOCHROMATIC PLATES.

Two rather general but erroneous ideas respecting "orthochromatized" photographic plates are (1) that a color screen—generally a screen of transparent yellow glass—has to be used with them, and (2) that they are only or chiefly valuable for use in copying oil paintings.

Now the camera, regarded as a piece of photographic apparatus, may well be compared with the structure of the human eye. The lenses of camera and eye are optical instruments of similar character and purpose. The lens of the eye projects an image of external objects on to a sensitive medium, the retina; and the lens of the camera projects a like (but usually much larger) image on to another sensitive medium—the photographic plate. It will be evident that the vraisemblance—the truthfulness to nature—of the photograph must

depend on the closeness of similarity between the sensitivenesses of the retina and the gelatine plate.

What is wanted is that the photographic plate should "see" things, so to speak, as the eye sees them. In this respect we have a faithful servant in the photographic lens or objective, for the image it produces is the optical counterpart of that formed in the eye, in outline is an absolute fac-simile. All that remains necessary to procure it then is that the lights and shades in the ocular and photographic pictures shall be similarly distributed. We have to bring about the identity of chiaroscuro in the two cases, and that is not a matter that depends upon the action of the lens.

The charming realism of the ground glass proves to us how well the lens performs its part. If only that could be reproduced on paper, in all the variety of its color, or even translated into monochrome, with all the gradation of its luminosity unchanged! How much photographers would be delighted! and what surprise, almost dismay, would be occasioned in the brush artists' hostile camp! We shall approach nearer and nearer to the attainment of this desideratum as the sensitiveness of our plates approaches nearer to that of the retina.

The difference between an ordinary plate and an orthochromatic one is simply that in point of sensitiveness the former approximates less closely than does the latter to the human eye. Our eyes assign to yellow the quality of a bright color, while blue (of the same actual intensity) appears comparatively dull. With photographic plates the converse is true. Supposing a blue surface and a yellow surface to throw off identical quantities of light, the photographic plate will "see" the blue as a brighter color than the yellow. The defect —unlikeness of "camera sight" to eyesight—was a very serious one in the old days of wet collodion. It is less serious now that we have the gelatine plate; and it is most perfectly eliminated by the plates or films sold as orthochromatic.

All this is quite independent of the use of a yellow screen, it may be observed. Such a screen is of service for diminishing the intensity of the violet and blue rays, which tend to impress their influence too vigorously in the camera; that is to say, it may assist the true rendering of color in photography with either ordinary or orthochromatic plates. But the value of the orthochromatic process stands on a firm basis, even if no screen or any other variation in the common routine of camera work is employed. It can be recommended, therefore (since there is nothing new to "learn"), whenever fruit or flower or landscape or a pretty dress has to be pictured in most realistic style. Indeed, the only objection that is to be urged against the orthochromatic plate is that it is a little "slower" than the brands in general use. —*Photographic Chat.*

## OBITUARY.

### Gottileb Gennert.

We announce, with great regret, the death of Gottileb Gennert, the well-known manufacturer and merchant in photographic apparatus and material, which took place at his home, March 5th last.

Mr. Gennert's connection with the photographic trade practically covered the history and development of photography in America. When he entered it the daguerreotype was at the height of its popularity, and he followed all the changes which have transformed the art until today, when the amateur can make his exposures and finish his negatives at any subsequent time by means of any plates and prepared developers.

Mr. Gennert was born at Braunschweig, Germany, on the 19th of June, 1826. His native country had, at that time, just passed through the Napoleonic wars and as a result he did not escape the universal hardships of those days, suffering the many privations to which all Germany was subjected. He also saw the troublesome times of the struggle for constitutional government.

At an early age Mr. Gennert left his home and visited in succession France,

Switzerland, Italy, and North Africa. A tour of this sort was a much more arduous and uncommon thing in those days of no railroads or steamships than it is to-day, and the varied experiences therein obtained were of the greatest after benefit. Returning to his home for a short period Mr. Gennert came to this country in 1856, and with his brother engaged in business as manufacturers of daguerreotype mats and cases, the establishment being located in Maiden Lane, New York. The firm was very successful, and when the negative processes ousted the daguerreotype Mr. Gennert was in a position to try his fortunes in a wider field.

Having a wide knowledge of the manufacture of sugar from sugar beets, Mr. Gennert and his brother went West and established a large refinery in the State of Illinois. As history has shown, they were twenty-five years ahead of the time, the unsettled state of business subsequent to the Civil War operating to the unsuccessful outcome of their enterprise.

In 1869 Mr. Gennert returned to New York and, again entering the photographic business, interested himself in the importation and introduction of albumenized paper, then coming into favor among photographers. For this purpose he visited the manufacturers at Dresden and secured the American agency for this specialty. This agency, and his enterprise in its management, made the name of his house familiar among American photographers. The business enlarged and soon attained remarkable proportions, and on this basis a general line of photographic specialties and supplies were added, until Mr. Gennert practically controlled many of the staples used in photography in this country.

Mr. Gennert was not only a large importer and jobber of photographic goods in the United States, but had a large acquaintance in European photographic circles. He visited Europe yearly and kept his finger on the photographic pulse of the world. For the past few years Mr. Gennert had relinquished the active management of his business, leaving these cares to his sons.

His passing will be mourned by all his associates, by whom he was highly esteemed for his strict integrity and honorable dealing. Our sincere sympathy goes out to his wife and children, to whom his lovable character was most fully revealed and by whom he will be most sorely missed.

### Henry Peach Robinson.

In the death of H. P. Robinson, which took place February 21st, at Tunbridge Wells, England, American and British photographers have lost a staunch friend and leader in all things pertaining to the advancement of their art.

Mr. Robinson entered the profession about 1852, and from the beginning of his career devoted himself to its development along pictorial lines rather than as a mechanical method of reproduction. In this, which became his life's work, he was completely successful, and his work and teaching are inseparably bound up with the beginnings and progress of pictorial photography. At the same time he was a master of photographic technique, and never wearied in insisting that the true foundation of pictorial photography is a complete knowledge of its manipulation as a branch of applied science.

When, in 1864, we began the publication of this Magazine, Mr. Robinson had but recently published his famous series of composition pictures, and we enlisted his valuable help in urging upon the craft the necessity and advantages of a knowledge of art in photography. Mr. Robinson was enthusiastic in the good work, and in the pages of this Magazine as well as by his numerous books the application of art principles was clearly discussed and emphasized.

In his own country Mr. Robinson's work was honored and appreciated. He filled many important offices in British societies, was awarded innumerable medals at exhibitions in England and abroad, and in later years was generally recognized as "the uncrowned king in photography." His books, notably his *Pictorial Effect in Photography*, have influenced the photographic world more deeply than the writings of any other worker, and thousands owe to him their inspiration and success in photography. In behalf of American photographers, as well as for ourselves, we extend to Mrs. Robinson and her family our sympathetic greeting.

*Intensifying without Mercury.* For obvious reasons many amateurs do not like mercury, and there are some intensifiers that do not contain it. The following is given by F. C. D. in the *News:*

One part of iodine and two parts of potassium iodide are completely dissolved in ten pints of water, and one part of this stock solution is diluted with about 100 parts of water. The negative, after being well washed, is placed in this bath until it has become entirely yellow, and the image appears purely dark yellow on a light-yellow ground. The negative should then be washed in water until the latter runs off clearly, when it is floated with a solution of

| | |
|---|---|
| Schlippe's Salt | 60 grains, |
| Water | 1 ounce, |
| Caustic Soda (10 per cent. sol.) | 6 drops, |

until the whole of the image has become uniformly brown. Finally the negative is again thoroughly washed and dried. The addition of the small quantity of caustic soda is to prevent surface crystallization. It is claimed that with this intensifier the operation may be carried out to a greater extent than with bichloride of mercury; that it gives clear shadows, and that it possesses the special advantage of removing entirely any yellow stain the negative may have acquired during development and fixing. Furthermore, with this intensifying method it is not necessary to wash the negative, even after fixing, as carefully as in the case of the intensifying processes with mercury, because small traces of hypo which may have been left in the film will be rendered innocuous by the free iodine. The iodine solution may be employed repeatedly if its strength is kept up by the addition of concentrated stock solution.

*A Good Varnish for Prints.* P. R. Salmon gives the following formula in the *News:*

| | |
|---|---|
| Borax | 15 grs. or 30 g. |
| Pale Yellow Shellac | 30 grs. or 60 g. |
| Carbonate of Soda | 5 grs. or 10 g. |
| Glycerine | 15 m. or 30 g. |
| Water | 1 oz. or 1000 c.c. |

The addition of alcohol will improve this, and in this case it is better to use only half an ounce or 500 c.c. of water; boil, and then when cool add the alcohol; allow to stand for two or three days and filter. This is always a difficult thing to clear, and the best thing to do is to add about 5 per cent. of powdered pumice-stone and shake well and allow to settle; the pumice merely carries the floating particles of insoluble resin to the bottom.

*Mending Cracked Negatives.* To make a cracked negative fit for use Dr. Miethe recommends the following process: Place the broken negative, the film of which must be intact, film side down upon a metal plate which has been heated so that it can hardly be touched by the hand. The break is then covered with Canada balsam, which readily melts and fills up the cracks. To give the negative more stability a large piece of the Canada balsam is put upon the centre of the back of the negative, and a clean glass plate the same size as the negative is laid over all. The melted balsam spreads out evenly, the excess being squeezed out. After cooling the plates are still further fastened around the edges with strips of Sheplie gum paper.

*Wood Trays to Withstand Acids.* To impregnate and coat large wood trays so as to withstand the action of acids and alkalies, place in a wide-mouth jar

| | |
|---|---|
| Syrian Asphalt | 2 parts. |
| Yellow Wax | 5 " |
| Rosin | 1 part. |

Add enough turpentine to dissolve into a thick fluid mass; this will require several days. Before coating saturate the trays with a thin oil varnish. When dry close the joints with ordinary putty or mass B, given below. When this is done give first coat of asphalt varnish diluted with turpentine, that it may better permeate into the wood. When dry repeat four to six times without thinning the asphalt varnish.

B.—Cement for joints and cracks:

| | |
|---|---|
| Asphalt | 20 parts. |
| Calophonium (rosin) | 50 " |
| Tallow | 10 " |

are melted in above order and run into the joints and cracks while it is in a fluid state.

# EDITOR'S TABLE.

AN OFFER OF PRIZES TO USERS OF COLLINEAR LENSES. We invite all those who are possessors of a Collinear lens to participate in a competitive exhibition of prints, the object of which is to bring out as much as possible of the good work done with *Collinear* lenses during the past two years.

We offer the following prizes:

$15 in cash for the best print, 5 x 7 size or over, showing high-speed instantaneous work.

$15 in cash for the best print, 5 x 7 size or over, showing time work, one-half second exposure or more.

$10 in cash for the best print, 4 x 5 size, showing high-speed instantaneous work.

$5 in cash for the best print, 4 x 5 size or under, showing time work.

$5 in cash for the best print made with No. 2 or No. 3 Folding Pocket Kodak or No. 3 Folding Weno Hawk-Eye.

The conditions governing the competition are as follows:

1. *Only* prints from negatives made with a *Collinear* lens may participate.

2. Prints must be in our possession on or before May 5, 1901.

3. Each set of prints must be accompanied by a letter containing the name and address of the sender and particulars as to the series, size, and running number of the Collinear lens used, the aperture, the shutter, and the time of exposure.

4. All prints are to remain our property, and we are to have the privilege of using the negatives.

5. Only one prize will be given to any one exhibitor.

6. The prints will be judged with respect to their technical excellence and artistic merit by three disinterested and competent judges, to be selected later.

VOIGTLAENDER & SON OPTICAL CO.,
New York.

---

MR. E. J. MCCULLAGH, one of many earnest Californian subscribers, has been elected a member of the Chamber of Commerce, of Stockton Cal., in which honor he has our congratulations. The Stockton *Daily Record* reviews Mr. MCCULLAGH'S career as follows:

"Not a movement has been started for the good of Stockton in the last ten years but that E. J. MCCULLAGH has been found well to the fore in it. While many busy men turn for recreation from business to photography, Mr. MCCULLAGH takes his rest from photography by turning to public business.

"Mr. MCCULLAGH was born in Michigan and spent his boyhood days there. He graduated from a Michigan high school, studied photography a year, and then moved with his parents to the State of Washington. He was there two years and then came to Oakland, Cal., to accept a position in the studio of F. A. Webster, one of the leading photographers on the coast.

"Five years later he came to Stockton and purchased what was known as the Bachelder Gallery, on Eldorado Street. Just five years ago he purchased the J. Pitcher Spooner Gallery in the Yosemite Theatre building, where he is now located.

"His unceasing study and work have brought him enviable success in his business. He has devoted the same thoughtful energy to the progressive public movements he has been connected with. The Chamber of Commerce is to be congratulated on having secured Mr. MCCULLAGH as a member of its directorate."

---

THE Nebraska Photographers' Association will meet in convention at Lincoln, Neb., May 21st to 24th, inclusive, and an attractive programme has been prepared, which promises practical help as well as an enjoyable time to all attending the gathering. Among the competitive classes a gold medal is offered for the best exhibit in the open class, which may be competed for by photographers in any State. A circular giving full information may be had by addressing the Secretary, Mr. ALVA C. TOWNSEND, Lincoln, Nebraska.

---

WE have received from Mr. H. A. COLLINGS, of Holyoke, Mass., the roster of the members of the Photographic Association of New England, a neatly printed booklet of convenient size. The New England convention will be held at Copley Hall, Back Bay, Boston, August 28th, 29th, and 30th, under the leadership of Mr. GEORGE H. VAN NORMAN, and a convention of unusual interest is promised.

---

MESSRS. ROSS, LTD., 111 New Bond Street, London, have issued a new *Abridged Catalogue* for 1901, listing their famous lenses and other photographic helps. A copy will be sent on application to Messrs. ROSS, LTD., at the above address.

---

PHOTOGRAPHERS interested in Ozotype, the new carbon process, invented by THOMAS MANLY, will be glad to know that Mr. GEORGE MURPHY, 57 East 9th Street, New York, has secured the American agency for Ozotype supplies, and will shortly be able to fill orders for the necessary materials.

A large stock of the new Seed sodas—carbonate and sulphite—is also carried by Mr. MURPHY. These sodas have been highly praised by many prominent photographers. Our experience with them proves that this praise is well deserved.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of:

# AMIDOL, Patent Developer.

**AMIDOL** is supplied in the form of fine, sparkling, little crystals.

**AMIDOL** is a **quick** and **powerful** developer, bringing out **all details** and giving **good density.** The chief characteristic of this developer is its power in conjunction with Sodium Sulphite **without the addition of other alkalies.**

The bad effects of a strong alkali such as Potassium Carbonate or Caustic Potash, whether it be on the operator's hands or on the delicate sensitive material, is therefore avoided.

**AMIDOL** ranks in a premier position for **developing Bromide paper,** giving **excellent gradations** and the **deep blue-black** deposit so much sought after, without stain.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $ 0.75 | 2.75 | 5.25 | 10.00 |

## AMIDOL, ready for use,

### in Cartridges or Glass-Tubes:

Per box of ten, giving each 200 ccm. solution: $1.50.

**N.B.** **To Tourists** and others these cartridges form a simple and reliable method of making up a developer ready for immediate use, each simply requiring dissolution in **seven ounces of water. Note the quantity of solution made when comparing prices.**

## Pamphlet on Developers (2d edition, 1900)

containing in 20 pages detailed description and instructions for use

**Free on Application**

through all dealers or through the following importers:

**E. & H. T. ANTHONY & CO.**
122 & 124 Fifth Avenue, 17th and 18th Streets, NEW YORK.

**MALLINCKRODT CHEMICAL WORKS,**
ST. LOUIS, MO., and 90 William Street, NEW YORK.

**THE SCOVILL & ADAMS CO., OF NEW YORK,**
3 & 5 West 19th Street, NEW YORK.

**UNITED STATES PHOTOGRAPHIC SUPPLY CO.,**
57 East 9th Street, NEW YORK.

RODINAL. EIKONOGEN.

Sold by all Dealers.

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 533.
MAY, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.

NOVEL EFFECTS. By Paul Clare . . . 153
LIGHTING NOTES . . . 154
GUM OZOTYPE. By Thomas Manly . . . 155
PHOTOGRAPHIC POSTCARDS BY THE KALLITYPE METHOD . . . 157
INTENSIFICATION AND REDUCTION BY CUPRIC BROMIDE. By Len. H. Ross 158
SPOTTING NEGATIVES. By a Printer's Assistant . . . 159
PHOTOGRAPHING DOGS. By W. J. Croall in the Photogram . . . 161
DAMPNESS. By Ferd. Herduth . . . 162
ON JUDGING DENSITY . . . 163
OUR PICTURES . . . 169
HOW TO HELP THE RETOUCHER. By Drinkwater Butt . . . 170
CONTACT COPYING OF ENGRAVINGS . . . 172
AN AMATEUR SIDE LINE. By Chas. R. Ansell . . . 173
PEN PICTURES OF CELEBRITIES. By A. G. Marshall . . . 174
BUTTON PORTRAITS . . . 175
PHOTOGRAPHY AT CUSTOMERS' HOMES. By Alfred Wilkes . . . 177
"TO SAFEGUARD THE INTEREST OF PHOTOGRAPHERS" . . . 178
ABOUT BUSINESS LETTERS . . . 179
A TRADE BRINGER. By E. Stanway . . . 180
TRANSPOSING FORMULÆ. By C. Welborne Piper . . . 181
TACT. By James Enos . . . 183
ENLARGED NEGATIVES. By E. W. Robertson . . . 184
A SPECIAL LINE . . . 185
THE WISCONSIN CONVENTION . . . 187
SODIUM SULPHITE. By Jex Bardwell . . . 190

OUR PICTURES:

Frontispiece, Pauline True Sperry. By George B. Sperry, Toledo, Ohio. Halftone Engravings from Photographs by Louis F. Jansen, Buffalo; S. L. Cassar, Malta; and others.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY

Fine money

The monthly edition of *WILSON'S PHOTOGRAPHIC MAGAZINE* has been *increased three times* since the year began. January, February, March and April numbers are out of print. These facts speak for themselves. Professional photographers realize that WILSON'S MAGAZINE is a trade journal that helps; that gives useful and timely information concerning things of interest to the craft; practical articles, formulae and methods; and instructive illustrations showing what American photographers are doing.

WILSON'S MAGAZINE is an independent journal for the practical worker; has no stock house or "influence" behind it, no "axe to grind." It gives all the news and is helpful, as well as interesting from cover to cover. Every photographer should see it every month. Send in your subscription to-day. Three dollars for 12 months. One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON
PUBLISHER
287 Fourth Ave., New York

PAULINE TRUE SPERRY

A Portrait by George B. Sperry, Toledo, O.

w
ries
al ar-
divan,
the cur-
and gate-
His studio is
all this careful
n background as
ork. Generally his
; sometimes a sitter
to suit the scheme of
if not the practice ob-
dered to pay for the time

Adam Salomon's work caused, perhaps, more comment and inquiry from the fraternity than the work of any other one man has done. His regular practice was to devote an hour every morning, before sitters began to come to the studio, in practice and experiments. He used a couple of lay figures, one dressed in black, one in white, and with them he tried every conceivable variety of pose and lighting.

Eight or ten years ago the frontispiece of WILSON'S was an "at home" portrait by Strauss. A portrait of a lady in evening dress, dreamily thinking as she sat beside her little writing-table. The lighting appeared to come from the electric lamp on the table. I believe—I write from memory—that the light *was* entirely from the lamp, daylight being carefully screened out, and that the light in the lamp was an electric one of about 200 candle power.

The examples of novel effects by Falk—busiest of men—which have appeared in the MAGAZINE are numerous. Two of the most effective—again speaking from memory—were a girl, in somewhat light drapery, feeding doves, and a beautiful head of a woman before a decorative background of apple blossoms. In January of 1900 the frontispiece was Kough's "Head of a Colonial Lady"—an example where the novel effect was entirely due to the subject and the lighting. It is safe to assume that Kough had worked out the whole question of that light long before the lady appeared in the studio. A still more recent example was the United States Volunteer by Lorey. In none of these cases was the picture a result of chance. It was always carefully thought out and preconsidered.

It is not every man who has the eye to see and originate, and to merely *experiment* with a sitter is fatal. The experimenting must be done beforehand. But the originator is the exception. It is not he who makes the success, but rather the man who can work out the originations of others. A very useful means of self-education is a scrap-book. Merit of line or pose or arrangement may be found in the most unexpected places. Little advertising booklets are often illustrated by experienced artists; the pictures in 1-cent newspapers are often delightfully suggestive of some happy idea. Two examples occur to me. All of us know Raphael's great picture of the Sistine Madonna. At the foot of the complete picture are two little cherubs—the incarnation of childish innocence. Rockwood, I believe it was, who took two children, posed them, and made a very taking little imitation. On the backs of one issue of our $2 bills are portraits of Fulton and Morse. How many photographers have studied those portraits, or the series of portraits on the front of a $1 bill? The Morse portrait is of a fine old gentleman with vigorous, snowy hair and beard. Hollinger had evidently studied this, for when a suitable sitter came along he recalled the pose and made a masterpiece on similar lines. This portrait by him was published in a little book *Retouching Negatives and Prints*, and is well worth studying. These examples are quoted because they are so flagrant that anyone seeing the photographic conceptions will at once recognize their likeness to the original. But there are thousands of hints where there are scores of examples all ready for copying, and the man who would take them must be ever on the alert—must, in short, keep his eyes open.

## LIGHTING NOTES.

IN Westminster Abbey there stands in the Poets' Corner a bust of Longfellow. It is said that the sculptor who modelled the bust never saw the poet, nor ever had a cast of his features. The work was done entirely from photographs and engravings. It would be interesting if some statistics of those photographs could be obtained. Whose productions were they; were any of them rejected as untrustworthy; at what periods were they taken; how much retouching, etc.? It might be useful, too, to learn if the sculptor formed any opinion of the status of photographers as artists.

A sculptor's medium has too much hard fact about it to allow him easily to cover

bad work under the plea of impressionism. A sculptor is, indeed, often called a modeller in clay, and it is modelling which is so often a weak feature of photography. There is a fashion, not, unfortunately, as rare as it should be, of trying to give effective tones by unduly lighting certain parts of the subject in large masses of local light, giving brilliant contrasts but hopelessly destroying any artistic value. The result often is a flood of light on hair, cheek, neck, shoulder, arm, and body, with the rest of the subject like a silhouette. Nowhere any of those half-lights, those transparent shadows which are so much and so glibly talked of, and which yet are very real and very desirable things to obtain. Or we may go to the other extreme, and flood our pictures with a great volume of light, coming from two or several directions. Such lighting is possible in the hands of a few theatrical photographers. But with most workers, though they do get that well-known white shimmer which lends a certain lustre to the picture, the effects are flat and weak. The case of over-lighting is well seen in those many photographs of a lady decked in jewels. These show as so many spots of white and might just as well be light reflections from a polished surface of some black glass or jet ornament. The well-known lighting called Klary's and seen in his works is, by the way, a good one for such subjects as this. The side curtains are drawn together at least up to the height of the sitter's head; the top curtains are also drawn slightly more than usual, so as to weaken the light from above. The curtains overhead are closed so that the forehead on the shadow side shows a touch of light, corresponding to that on the light side, but only on the edge; the same on the cheek and the body. This lighting, with modifications, is a favorite one in the hands of Klary.

The real secret of beautiful lighting is usually to be found in the unity of the illumination. There should not be useless cross lightings or mysterious double shadows. If there is but a single source of light to be made use of it must be sufficiently evident in the picture whence it comes; in cases where there are two (in very rare cases there may be more than two), so must the direction and effect of each indicate its position. For if the picture appears as though the model had been drowned in a flood of light all repose and unity are lost—and these are first essentials of artistic composition.

## GUM OZOTYPE.*

### The Ozotype Principle Applied to Pigmented Gum Printing.

BY THOMAS MANLY.

ANOTHER of the possibilities of ozotype has become an accomplished fact. Gum-bichromatists need no longer work in the dark. Instead of printing through pigmented gum, a perfectly visible print, the merits of which can be easily judged before commencing operations, is at the disposal of the worker, ready for pigmenting with gum at any time he wishes.

The well-known advantages of ozotype apply equally well to this department of photography as to gelatine or carbon printing. After having prepared and washed a stock of ozotype prints no anxiety need be entertained with respect to the effect of daylight in pigmenting or drying. These operations can be carried out in full sunlight, if necessary, and in convenient stages.

Gum arabic, unless fortified with bichromate of potash or some other agent capable of rendering it less soluble than in its natural state, does not offer sufficient resistance to the action of the large quantity of water employed in the "dépouillement" or development.

As a bichromate salt cannot be used in this case, the agent which I have substituted for the purpose of stiffening the gum is chrome alum. For those workers who prefer a picture capable of being retouched

* The ozotype materials required are obtainable in America from George Murphy, 57 East 9th Street, New York.

with a camel's-hair pencil I would recommend 50 minims of stock solution B (chrome alum) mentioned below to each ounce of gum and pigment.

For those who desire a quicker development and more solubility much less will suffice; for example, commence with about 10 minims. I have never attempted the gum-bichromate process as at present worked, the invisibility of the image having deterred me from trying it. My present limited experience has been gained by reading Messrs. Demachy and Maskell's handbook on the subject, but I have found that if the coating of gum and pigment dissolves quickly in cold water the stability of the image is impaired. In many of my experiments, before I used chrome alum, a beautiful picture was formed, but alas, dissolved away when hung up to dry, owing to the want of stability in the gum.

Some of your readers who are gum-bichromatists are probably not familiar with the process of making ozotype prints. The paper they use is, as a rule, properly sized; therefore they have only to coat it with the patented ozotype solution in the manner described in the handbook on that subject, published by Messrs. Tennant and Ward, 287 Fourth Ave., New York. Price 50 cents. This book, as well as the ozotype solution, can be obtained at the principal photographic dealers.

Having coated and dried as much paper as will be considered sufficient for about one month's consumption, cut it up into the required sizes, and expose under the negative as in platinotype or silver printing.

Print deeply, but do not let the action of the light penetrate through the high lights; in other words, do not "print through." After exposing, place the prints in a dish of *cold* water for not longer than ten minutes. The water should be agitated by letting the tap run gently into the dish, and changed once or twice. The prints can then be dried by placing them face upward on blotting-paper, or they may be hung up either on a line by pegs, or on shelves by dark-room pins. The duration of exposure is about the same as in platinotype printing, if not quicker. With a dozen frames, it is no exaggeration to say that from fifty to one hundred prints can be taken on a fine, bright day, and these can all be stored up for pigmenting at any convenient time, light having ceased to affect them after the ten minutes' washing mentioned above.

The required stock of prints having been prepared, the process of pigmenting is carried out as follows. Make up stock solutions:

| | | |
|---|---|---|
| A.—Water | . . . . . | 5 oz. |
| Sulphate of copper (pure) | . | 1 " |
| B.—Water | . . . . . | 5 oz. |
| Chrome alum | . . . . . | ½ " |

These two solutions will keep good indefinitely, and may be put away on the shelf for use at any future time.

*Gum Solution.*

C.—2 oz. of gum arabic to 5 oz. of water.

To each ounce of this gum solution add 1 dram of A (sulphate of copper solution, as above), 10 to 50 minims of B (chrome alum solution, as above), according to the degree of insolubility required, and sufficient pigment to suit the taste of the operator.

N.B.—Some workers may consider this solution too thick; if so, cold water may be added to produce the required consistency.

If kept any considerably time, this solution (gum and pigment) may probably become by degrees too insoluble, but I have not had time to verify this statement.

*Acetic Solution.*

| | | |
|---|---|---|
| D.—Water | . . . . | 1 oz. |
| Acetic acid (glacial) | . . | 30 minims. |
| Hydroquinone | . . . | 15 gr. |
| Ferrous sulphate | . . | 5 " |

It is best to buy the ferrous sulphate pure and in the granulated form. Crystals are rather difficult to weigh out and dissolve.

Owing to the presence of hydroquinone and ferrous sulphate this solution will not keep more than a few days, but as the quantities are so small the preparation of a fresh solution after about three days will not entail much trouble or expense. If the solution turns brown in a day or two it is not necessarily spoilt.

To 1 ounce of C (gum solution) add 50 minims of D (acetic solution), and mix

well with a brush. Smear the ozotype print and soften with a badger-hair brush in the same way as in the gum-bichromate process.

Hang up to dry or place the print face upward on a piece of blotting-paper for that purpose.

When dry, develop in cold or hot water, according to the state of insolubility of the gum. A slow development is better for preserving all the details than a quick one.

An even coating of gum and pigment is of advantage to both gum-bichromate and gum ozotype, but in the latter it is of less importance. In the ordinary gum-bichromate process the light has to penetrate the gum coating. It is therefore evident that any inequalities in the thickness will be repeated in the image, whereas when the action takes place immediately from the surface of the paper to the underneath surface of the layer of gum, which is the case in ozotype, any extra thickness of gum can be washed away in developing.

My firm conviction that an ozotype image would produce a similar effect on gum as on gelatine if the active agents were differently applied, led me to experiment in that direction, with results which, in my opinion, are entirely satisfactory.

I do not claim that the details of the new process I have described cannot be improved upon. Some of the ingredients can be modified and varied in order to produce any desired effect, and if the instructions are carefully carried out, a charming picture, showing full details and capable of artistic after-treatment, will be the result.

The main difficulties of the gum-bichromate process have been removed, and, after a few trials, I venture to predict that workers of the old process will, in course of time, adopt the newer and simpler method, and that many new workers will be attracted to this most interesting branch of photographic printing.—*The Amateur Photographer* (*London*).

## PHOTOGRAPHIC POSTCARDS BY THE KALLITYPE METHOD.

THE idea of sensitizing postcards is older, much older, than dry-plate photography, but in this country at least has never been carried out to any large extent. Three or four years ago, however, the pictorial postcard suddenly sprang into fashion, and to-day, when we used to expect that the fashion would have been long dead, it is more virulently alive than ever. These cards are not photographic, but are printed in half-tone or in color-lithography. A few foreign ones, chiefly we believe from Eastern Europe, are actual photographic prints. But for the most part our photographs are confined to the amateur, who mostly uses the excellent Velox ready sensitized cards to perpetuate his pictures. The postcard from its very nature is unsuited to bear any very valuable picture. There is too much risk of soiling or breaking in transit to allow it to bear say a carefully printed platinum portrait, and the two or three cents which a colored one usually costs is about as much value as will safely be risked by the average man. The preparation of ready sensitized cards for home consumption is a topic worth consideration. First it will be well to rule out of court all silver prints. To prepare silver paper at home in small quantities is costly, and it is too delicate a task to be lightly undertaken. The paper will need to be pure stock, not always easily obtained, carefully sized, and very carefully sensitized. Leaving silver methods alone we come to the light sensitive preparations of which the simplest, most convenient, and most satisfactory are the ferric group. For these processes we need no special paper and the government postcard is quite satisfactory for coating. It has, however, the disadvantage that as each card bears a one-cent stamp it is a little expensive if there is any tendency to spoil prints in any way. A safer plan would be to buy "private postcards" to which no stamp is affixed. It may be pointed out that the regulation size of a postcard need only be adhered to where some writing appears on the reverse side, or in addition to the address. Where a simple picture, without any writing whatever, is sent it comes under the third-class rate, and if the weight is not exceeded it may measure a foot square and yet go for a

cent. Usually, however, some word of greeting is added to a picture postcard, and so it must not only conform to size requirements, but must also bear the usual printed formulæ on the address side.

Of all iron processes the simplest is undoubtedly the common blue-print process, and both amateurs who send their own and photographers who sell pictorial postcards may advantageously use it. Of blue-print formulæ there are no end. Probably the simplest one is to take a 10 per cent. solution of potassium ferricyanide and a 25 per cent. solution of ammonia citrate of iron. Mix these in equal quantities and coat the cards with a soft brush or pad of cotton wadding. Let the cards dry in the dark, when they are ready for use. Prints with this formula should be carried pretty deep. Although blue prints when from a right negative and *carefully made* are exceedingly beautiful, the most satisfactory of the comparatively easy methods is undoubtedly kallitype. Prints by this method can be made to closely represent platinotype, and much latitude in tone, etc., is possible.

A good formula for kallitype sensitizer is oxalate of iron, 6 parts; nitrate of silver, 3 parts; water, 50 parts. Place the iron in a stoppered bottle and pour the water on it. Heat will be required to help the dissolving. Place the bottle in a saucepan of water, which gradually heat, and also occasionally shake the bottle. If the solution does not appear quite clear it must be filtered. Then add the silver nitrate and keep the solution in the dark. The paper prints out somewhat like platinotype, but the image is slightly less vigorous in the shadows. The paper should be quite dry when printed and backed by a celluloid or rubber pad. When sufficiently printed the paper is developed by one of several developers according to the tone required. For sepia tones 20 grains of Rochelle salt are dissolved in 1 ounce of water and to this solution 25 drops of a 1 per cent. solution of potassium bichromate is added.

For purple tones double the strength of this solution and to every ounce of the solution add 10 grains of borax.

For black tones the proportions are: borax, 40 grains; Rochelle salt, 30 grains; potassium bichromate, 1 per cent. solution, 1 dram; water, 1 ounce.

The potassium bichromate solution is used to restrain; too much will destroy the half-tone, too little will give muddy prints and stain the high lights.

The prints should be transferred direct from the developer into a fixing bath of strongest liquid ammonia, 6 drops in an ounce of water. Turn the prints over frequently in this for ten minutes, then remove them to a second similar bath, and again turn them for ten minutes. They are then fixed and should be washed in running water for twenty minutes and dried.

## INTENSIFICATION AND REDUCTION BY CUPRIC BROMIDE.

BY LEN. H. ROSS.

It is strange how many and varied are the agents employed to build up thin negatives, or to reduce over-dense ones; and how few people are entirely satisfied with any or even all of them. The use of copper bromide is by no means new, but it is a good reliable first stage towards either intensification or reduction. The copper method is not necessarily the best, but it must be remembered that very much of the complaint as to the uncertainty of intensifiers is due to the fault of neither the chemical nor the process, but of the worker. Very much emphasis is laid on the necessity of completely removing the hypo from the plate, but even more important is it that the plate should be perfectly fixed in the first place. It is well known that a plate is not fixed as soon as it appears to be fixed, and the safe rule is to leave the plate in the hypo for as long a time after it is cleared as it has taken to clear. When it is known that a plate has to undergo after-treatment it is a good rule to fix again in a second solution of hypo. This second bath should be newly mixed, or at least not have been used for ordinary fixation. If kept for this special purpose

it will last some time; and then the photographer may, if he is a careful soul, use it for his ordinary work.

Little less important than complete fixing is sufficient washing. The length of time for washing varies, but two hours in running water should eliminate all but an infinitesimal part of the hypo. To get rid of this last minute trace of hypo, a solution of chrome alum acidified with hydrochloric acid is about the best method. After a short immersion in this bath the alum must be washed from the negative and it is then ready for intensification.

It may be that the negative to be treated is an old one and sometimes these require a very long soaking to soften them. Immersion in a weak solution of glacial acetic acid, one dram in ten ounces of water will soften the film and make it take the water. It should then be washed to get rid of the acid, and as many plates are imperfectly fixed, it will be well to first give it a bath of hypo, and then proceed to eliminate the hypo as described above.

We have dwelt so long on the preliminaries because their thoroughness are of cardinal importance. We have, we think, said enough to show the reason of many failures in intensification and reduction, for the need of fixing and washing are the same whatever method of after-treatment is employed. In copper intensification the image is bleached with cupric bromide and next blackened with nitrate of silver. Exactly what happens seems a little vague. On applying the bleacher, cuprous bromide and argentous bromide appear to be formed and the former reduces the silver nitrate which is applied afterwards. To make the solution, dissolve 196 grains each of copper sulphate and potassium bromide in separate one ounces of distilled water. The water must be hot, and as soon as the two ingredients are dissolved mix them in a beaker and stand it in a bowl of cold water to cool. There will be a crystalline deposit (sulphate of soda). When this is settled the clear green liquid (cupric bromide) should be carefully poured off. Bleach the negative with this solution until the film is a pale yellow all through. Then, before intensifying, it must be washed. Probably fifteen minutes will be sufficient. Too long a washing will prevent any subsequent intensification doubtless through the cuprous bromide becoming oxidized or converted by the wash water. Washing must be in the dark, but a piece of cardboard or wood to cover the washing tank will be sufficient. After washing drain off the water, and if any drops collect mop them off. Flood with nitrate of silver solution fifty grains in an ounce of water, and when sufficiently blackened wash well. If intensification has been carried too far reduce in cyanide of potassium solution, two grains to an ounce of water, and again well wash.

If reduction is required the plate is placed in a weak (five per cent.) solution of cupric bromide until a slight reduction takes place. It is then rinsed under a tap and placed in a common hypo fixing bath. If this does not sufficiently reduce it the process may be repeated. In all reducing methods it is essential that the solution be kept constantly flowing over the negative. The dish must not be allowed to rest a moment.

The fundamental essential to successful results is the complete fixation of the negative in the first instance, followed by complete hypo elimination. Time, therefore, must not be begrudged.

## SPOTTING NEGATIVES.

BY A PRINTER'S ASSISTANT.

THE spotting out of pinholes in negatives is one of those apparently simple things usually regarded as so very easy that it need not be taught to anyone. And yet there is a right and a wrong way of it, and very often the wrong way is the one adopted. Spotting is a task often deputed —in large firms—to young girls on small salaries. The young girl is no doubt the right person to do spotting, but as for the wage—well a five-dollar girl will do five-dollar work. But one well instructed and careful girl will do more, and better, work than three whose training has been insuffi-

cient and whose judgments are slight. Spotting is usually looked on as one of those unfortunate but necessary evils to be slurred over and disposed of as quickly as possible. Too often hasty work on the negative means work on the print.

Though we can, by care, reduce the number of our pinholes we can never wholly get rid of them, but however few we may have in the negative there will be fewer in the print. In examining a negative we do so by transmitted light, usually holding it up to the sky. In looking at the print we see it by reflected light—which is not nearly so brilliant. Then too the size of a pinhole as seen by transmitted light is exaggerated by halation. And very few pinholes which occur among the darker parts of a print need any attention.

It is well for an inexperienced or not very skilful spotter to see a print from a negative before commencing to spot. The spots will appear much less emphatic in the print than in the negative if the latter is held up to the light.

This would suggest that it is possible to use too strong a light for spotting, or at least that a weaker light will reveal all the spots that need any attention. But too weak a light is hard on the eyes to a certain extent, and it leads to a tendency to spot out too heavily, with a resultant white spot in the print, a moderately good light one which allows the negative to appear about as bright as a print when examined by good lighting. But the experience born of practice will prove a sufficient guide to a careful worker.

Almost any color is right for spotting, and many various colors are recommended by different people. Some recommend vermilion or gamboge, others believe in Prussian blue, which is about as wide a range as photography knows. In fact almost any color will do, for it is merely a question of stopping surplus light, and the chief essential is that the spotter should be able to judge the value of his color in this respect. Perhaps the best is some neutral gray. Roland C. Whitney, one of the best of retouchers, suggests a mixture of Chinese ink and Payne's gray as both certain and easy in working. A little of each should be ground on an opal plate, and the two mixed together with a little weak gum-water, varying the proportions of each pigment to suit the color of the negative to be spotted. The paint should be applied to the spots with a small red sable brush, say No. 1 or No. 2.

There is a right and a wrong way to fill a brush, and the worker who does not know how will ruin many brushes and never have one that will work sweetly. The brush should first of all be placed in a glass of water, after which as much of the water as possible must be squeezed from it by pressing it against the sides of the glass. Then a little color must be picked up from the palate on to the top of the brush by a rotary motion, twirling the brush handle between the fingers and thumb. If the brush is pushed backward and forward on the palate it will bend the hairs and very soon destroy the brush. When enough color has been taken up by the brush, it is carefully pointed by one or two strokes of the brush on the palate. When properly primed the brush will hold paint on its tip only while the body of the brush will be charged with water, with only just sufficient water to hold the hairs together. The brush must not even be allowed to become choked with color and must be continually cleaned.

In spotting, the extreme tip only of the brush is used, the touch being very light, and the brush being held almost perpendicular to the negative. A single touch very carefully placed in the centre of a small hole will usually be sufficient, for a larger hole two or more touches will be necessary but one should not be put on until the others are dried, for a very large blemish a wash of water color can be spread over the whole, before doing the spotting. The plan sometimes followed of rapidly stippling in a number of very minute dots should never be tolerated. It means more work and less satisfactory result. The color is not really deposited *on* as much as *in* the film; that is, it is a matter of capillary attraction. It is therefore impossible to do the work properly by any series of rapid touches. The point of the brush being very carefully placed in the centre of the spot, it is held there for a second or two to allow the color to soak off.

A habit of using the finger to remove

surplus color is not a good one; the finger tends to grease the negative.

If a little extra time is spent on spotting the negative it is well-spent time. Careless work means that much of it will have to be repeated on the print.

## PHOTOGRAPHING DOGS.

BY W. J. CROALL IN "THE PHOTOGRAM."

PERHAPS among the various and distinctive classes of photography, none is more interesting nor gives more pleasure to the lover of animals than the portrayal of whichever kind one takes up by the means of photography. Whether one depicts sheep, cattle, rabbits on the run, or any other of the various mammals, it must be borne in mind that all these animals have their distinctive habits; and, apart from the pictorial construction of the picture, the photographer should, as far as possible, try and delineate these traits when he is taking the photograph. In this article I am going to talk about the portrayal of dogs, and I will divide what I have to say under the two heads of (1) photographing dogs (singly or in teams) as a breeder would wish them shown, or as an owner would wish them to appear in the show-ring; and (2) photographing sporting dogs in the field.

1. I use a screen five feet high by about six feet in length, having both dark and light sides; for the dark side brown felt will be found useful, and any light monotone will be found suitable for the other. Choose a convenient bank, about four feet from the ground, on which to erect the screen. Where a bank is not easily accessible, a good substitute will be found in a board about the same length as the screen, and with legs from about three to four feet in height. In order to get the appearance of the ground, cover the board with glue, and sprinkle fine earth or mould upon it as thickly as possible. Also affix to the front of the table a thin board painted dark, so as to hide the wooden legs. With this simple apparatus (either by using the bank or the table) the photographer is ready to take dogs of all kinds. It is as well that the owner of the dog should come with him, or failing that, someone who knows the dog well. When bringing the dog before the screen, it is advisable to remove the chain and affix to the collar a thin string which can easily be blocked out in the negative. The collar should be plain dark leather, having no bright parts. The dog being in position, the benefit of having some one with you who knows him well will easily now be seen, for it is of importance that the dog should be full of life and animation if he is to show himself in his best form. To get this, the best method is to give the owner or trainer a rabbit skin, piece of meat, or lump of sugar, according to the kind of dog you are photographing. Let him approach and allow the dog to see and smell whatever is being used, then slowly back out of range of the camera. The dog, more especially if he belongs to the sporting class, will naturally put himself into position, and when he does, make your exposure. In order not to waste time, it is desirable to have the dog placed where you wish him, to focus, and having the holder in position and drawn, to devote your entire attention to watching his position, and make the exposure at the proper moment. Personally, for this kind of work I use a Ross twin-lens camera having full-sized view finder and fitted with paired Goerz lenses. One last word on this subject: In making your exposure, make it as full as you possibly can.

2. The second, and, in my opinion, much the more interesting class of photography, is the taking of sporting dogs at work. I think there is perhaps no finer sight to be seen than, on a fine 12th of August, a brace of pointers or setters ranging over the moor quartering their ground well, and obeying the silent orders of the keeper, the one dog coming to a dead stop on a warm point, and the other backing up well. It was by first seeing this, and being enthused by the splendid picture it made, that induced me to try in a small way, by means of photography, to trans-

mit a rendering of this in monotone. The best time of the year for securing a picture of this nature is about the middle of July, as then the birds from the nests are very young, and there is more chance of a steady point, and not so much trouble in getting it. We will take it for granted that we have arranged this with the keeper, chosen a suitable day, when there would be good scent, and have arrived on the moor. The keeper meets you with his dogs; but before starting it is a good plan to get to know the dogs, calling them by name, and spending, say, about half an hour with them. Having done this, you start, and perhaps in about half an hour the pointers come sharp to point on a good set. Lose no time now. Have your shutter set to the proper speed, and if you are using a twin-lens camera, have your plate in position ready for exposure; carefully and quietly approach the dogs, make the exposures of the different positions as quickly and quietly as possibly, avoiding disturbing the dogs as little as possible. The reason for this is that the dogs are easily disturbed, and birds, as a rule, get restless, and easily flushed. The benefit of knowing your dogs is now apparent, as usually they will pay little or no attention to you, whereas had a stranger approached they would most likely have become uneasy, and the opportunity would have been lost. This class of photography is difficult, so much depending on the weather, the dogs, and yourself. If you have a long walk of over an hour before your opportunity arises, don't be disheartened, as, in my opinion, if you get good results, you are well repaid for all your trouble. A Watkins' exposure meter will be useful; but give as full an exposure as you possibly can.

## DAMPNESS.

BY FERD. HERDUTH.

I RECENTLY purchased at an auction two small bundles of photographic journals. They had the appearance of age and I speculated. But nothing of value to me appeared in them—but from them I got a hint which I pass on. One of the bundles contained a copy of WILSON'S dated in the early seventies. It contained a silver print frontispiece, in as perfect a state as on the day it was printed. The other bundle was entirely composed of old magazines (photographic) of eight to ten years ago. There were not in the whole lot of some fifty prints half a dozen which looked respectable. Faded or spotted, they formed a scarecrow crew. Now I am not going to draw the obvious moral, to praise WILSON'S and albumen at the expense of other magazines and newer processes, simply because such would not, in this case at least, be true.

The difference was that the old magazines had been stored for a quarter of a century in a dry place, and the other bundle had been left, at some period of its shorter term of existence, in a *damp* place.

The best antiseptic in all photographic work is dryness. Plates exported to the tropics are kept hermetically sealed, in metal boxes, to ensure dryness. We keep our paper dry, and for our platinum paper, which is peculiarly sensitive, manufacture an artificial dryness with chloride of calcium. Eastman gives us a date limit on his films, but men who understand care have carried films for years and obtained successful results. Plates have been forgotten and then come up perfect after ten years' dryness.

It is this lack of dryness which more than any other one thing is responsible for the fading of prints. I don't wish to minimize other causes—insufficient fixing, too little washing, etc. Photographs pasted in albums are peculiarly liable to deterioration. A "damp" room is quite sufficient to cause the trouble. A cardboard mount is like a frog—it will absorb moisture through its skin. In papers such as are commonly used for mount making and album leaves there is a certain amount of sizing and sulphate of lime. This is easily affected by damp. The chief steps in a rather intricate change are that the sulphate of lime becomes sulphide of calcium, and this latter reacting with carbonic acid,

which is also evolved, gives traces of sulphuretted hydrogen—and sulphuretted hydrogen around damp prints is fatal.

It is to a large extent a mere mathematical calculation of cause and effect. We all know the putrescence due to over-abundance of water. Dry packet gelatine will keep indefinitely, but let it be thoroughly soaked with water and in a very few days it will become an evil-smelling, mouldy mass. The other extreme is the perfect dryness which will keep a mummy for æons. And this extreme is the one to be desired.

## ON JUDGING DENSITY.

One of the most difficult things, perhaps, in photographic practice, is correctly judging the density of a negative, and stopping development at exactly the right moment. Even the most experienced workers often find themselves stumbling in this respect, and obtaining results they did not aim at or anticipate, while others again seem to have a happy knack of always withdrawing the plate at the critical instant. It is probably, to a certain extent, a matter of temperament and keenness of perception, which some possess to a greater degree than their fellows. Undoubtedly many otherwise expert manipulators find remarkable difficulty in this stage of their work, a difficulty that can only be accounted for by some personal idiosyncrasy. After all, the recognition of the depth and intensity of a negative image in a weak monochromatic light is a decided test of visual fitness, and a more trying one than perhaps most of us realize. There are, however, a series of factors influencing the arrival at a correct estimation of the progress of development which might easily be kept constant, thereby reducing materially our liability to error.

It goes without saying that this question of density is one of considerable importance. The quality of our prints, and, to a great extent, the satisfactory rendering of tone values and gradation, depend so largely on the degree of opacity of the negative that we cannot afford to ignore the matter. There are some, indeed, who attach but little importance to the subject, arguing that intensification or reduction are so easily resorted to if any modification is required. Now it may be said that although these auxiliary processes are of great value in many cases, an intensified or reduced negative will not give such artistically accurate gradation as one correctly exposed and developed. Intensification and reduction may, of course, often effect a considerable improvement, but in such cases it will, as a rule, be found that the plate has been incorrectly exposed. To explain our meaning more clearly, it is generally the over-exposed negative that gains in effect by intensification, while those over-exposed and over-developed are likely to be improved by reduction. Under-exposed negatives, whether thin or over-developed, though certainly rendered more printable by reducing or intensifying, as the case may be, will almost inevitably have their gradation utterly falsified. Moreover, however satisfactory an intensified or reduced negative may be, there is generally no getting away from the fact that it would have been better still if such modification had been unnecessary. We will not attempt to define what is meant by satisfactory density, there are too many different opinions on the subject. That degree of opacity which each worker finds to give him the result which he desires, in the chosen printing process, is to him that which constitutes a successful negative.

Taking for granted, then, the value of correct density, we will approach the consideration of some of the factors that help or hinder its attainment. Certainly not the least of these is the illumination available in the dark-room. When we take into account the Cimmerian gloom of so many of the places devoted to development, the wonder only grows that those who use them are able to develop with any degree of accuracy at all. The exact estimation of density requires a fairly bright light, one, moreover, that is steady and constant. Although many workers are fond of it, daylight, it need hardly be said, must inevitably cause great uncertainty by its frequently altering value.

Somewhat contrary to the general idea, candle and oil lamps are open to much the same objection, for they do not burn, as a rule, with any remarkable uniformity. A little reflection, and one or two experiments, will soon convince anyone of this. All things considered, gas is perhaps the best illuminant for the dark-room. If the burner is kept in good order, the supply adequate, and the flame turned up to an uniform height, we have got as near, probably, to a satisfactory and unchanging light, for all practical purposes, as we could wish.

A word of warning may be spoken here against examining the negatives at varying distances from the lamp, since the apparent strength of the former will increase or decrease according to the amount of light they are viewed against.

The glass or medium through which the light is filtered is necessarily a matter of importance. Mr. Howard Farmer has shown us conclusively that a large amount of light may be allowable if only the medium employed for eliminating the actinic rays is suitable in quality, and tested to cut off only certain parts of the spectrum, and perhaps the old gloom and mystery of the dark-room will presently vanish in favor of saner methods. We have at least the knowledge that should lead to better things, and condemn ourselves to darkness only by our own bad taste. This reminds us of the tale related of a well-known French photographer, who rushed excitedly from his dark-room lately, perspiring and irritable. "Quelle chambre de diable!" he exclaimed impatiently. "Oh, don't call yourself names!" mildly expostulated his wife, who happened to hear him.

Ability to judge correctly of density depends not only on the light, but on certain uniform conditions being observed as regards temperature and developer. The necessity of keeping the dark-room and the solutions employed equally warmed in winter, and of having some means of securing immunity from too great heat in summer, can hardly be overrated. The best way of doing this depends, of course, largely on individual circumstances and requirements. Uniformity of developer is more easily obtained. Most workers will probably agree that, except in special cases, adherence should be made to the use of that developer which we have tried and found to satisfy our personal inclinations, and that it should be kept, as far as possible, of a known and definite constitution. We are all aware that the composition of the developer can be varied to secure greater or lesser density in the result, but what we sometimes overlook is the fact that not only apparent density during development has to be considered, but also the amount of loss that will take place in fixing. With some developers this loss will be greater than with others, and the negatives consequently thinner, although they may have developed to apparently sufficient density. This, of course, has to be allowed for to the extent that experience teaches us is necessary.

A thing that does not generally receive sufficient attention is the condition of the fixing bath. A good many people imagine that the development of the plate is all that requires any particular notice, and that so long as the hypo will fix, matters are proceeding satisfactorily. In reality, however, the final density of the negative is often much affected by the state of the fixing bath, and it is decidedly worth while to keep it at a definite strength and temperature. The practice of repeatedly using the same hypo cannot be recommended as conducing to the best results; it is far wiser to make up quantities of a stock solution and to take it fresh as required.

Another factor to be considered in arriving at a precise determination of density is the character of the plate itself. A thickly coated plate being more opaque than one thinly coated, necessarily requires development to a greater apparent density than the latter. Some plates, also, other things being equal, appear to lose more than the average amount of depth in fixing. Films coated on celluloid and kindred materials are rather deceptive in this respect and require a certain amount of allowance to be made. The serious worker soon perceives the advisability of adopting one brand of plate or film, and adhering to its use. He is then the better able to master its individual vagaries and to obtain perfect control over his results.

The kindly science of to-day has provided us, if we will, with a system of tim-

ing development, by noticing the time of appearance of the high lights, and allowing the plate to remain for a certain multiple of that time. Many people find this method quite sufficiently accurate to satisfy their wants, and succeed in producing excellent technical work by its means. Needless to say, however, the pictorial school, with their adoration of individuality and the personal element in a photograph, will have but little to do with anything that tends to make their work more mechanically exact, however scientific in theory and practice such proceeding may be.

We cannot conclude these remarks without describing the decidedly ingenious way in which a certain young beginner in photography, who cordially detests development, overcomes the to him inexorable difficulty of correctly deciding density. He one day got an expert friend, a well-known authority on all photographic questions, to develop a plate for him. This he straightway washed, without fixing it, and hunting up a few waste negatives of his, he pasted tissue paper on their backs, with the object of making them as opaque as they were before fixing. He then, in the dark-room, and by his ruby light, compared the unfixed developed negative that his friend had done for him with those of his own which he had just prepared, until he had selected one of latter which appeared of exactly the same density as the one previously developed. When he develops now, he simply examines his plate by the side of his prepared negative, and withdraws it when of equal density. This idea is simply given as a curiosity, but is certainly a good example of that inventiveness proverbially produced by necessity.—*British Journal of Photography.*

## CHIPS FROM A PHOTOGRAPHIC WORKSHOP.

*After-treatment of Development Papers.* It has more than once been urged against some of the popular development papers that there is no latitude allowable in exposure. Perhaps it would be nearer the mark to say that if the exposure is correct development is almost automatic, and there is little possibility of failure. But certain it is that in the hands of inexperienced workers there is a considerable and unnecessary amount of paper wasted. If an error is made at any stage it can often be remedied and a print made, if not perfect, at least presentable by judicious afterwork. Of course, it must be understood that in the case of either under-exposure or under-development little or nothing can be done afterward; but experience shows that the tendency to error in the production of developed positives is greatly in the direction of over-development, and to a less degree of over- rather than under-exposure. The majority of faulty prints may, in fact, be considered as amenable to subsequent treatment.

It may be pointed out that there is no vital difference between positives on paper and those on film or glass.

For the reduction of over-printed or developed bromides Farmer's reducer, used very weak, is deservedly a favorite medium. But where over-printing really means a print from a thin detailless negative, any attempt to relieve the heavy shadows by this method will prove futile; for Farmer's developer attacks the finer detail first, and so will make bad worse.

A better reducer to use is doubtless one of copper, iron, or mercuric salts. On the whole we prefer to use cupric chloride or cupric bromide. Cupric chloride may be made by dissolving common salt and sulphate of copper equal quantities, separately, in hot water.* The solution should not be very strong and is best prepared by dissolving about a 20 per cent. solution of each salt, mixing them, and diluting before use. To treat a positive that is only slightly over-printed, immerse it in very weak solution of the bleaching agent until the desired result is judged to have been attained. This can only be safely arrived at after some experience; but, when a chloride is employed as the bleaching agent, the effect produced by the bleaching is very similar to what it will be after the subsequent treatment, which consists in

* Cupric bromide is dealt with on another page of this issue.—[ED.]

simply passing the proof through a bath of clean hypo and washing thoroughly afterward. If reduction is not sufficient the print may be again treated, but if reduction is too much the case is hopeless. A modification of the process may, therefore, prove better. Use a stronger solution and let it act to its utmost. Then, after a thorough washing, proceed to re-develop with hydroquinone, amidol, metal, or any suitable developer, in full daylight, when it will be quite easy to stop the action at any desired stage. Then fix as usual.

This plan has the advantage that it preserves the most delicate details of the lights of the picture, while over-heavy shadows may be reduced. In fact, in the redevelopment the finer details are fully reproduced long before the shadows have gained their full strength, and these can be stopped at any moment. The process is practical and safe, but sufficient washing between each operation is very necessary.

*The Dark-Room Light.* There is an old saying "have a safe light and plenty of it." There is much truth and more sense in the advice—but there is no such thing as a *safe* light. However, there should be *plenty* of the nearest possible approach to safe light. There is no reason why a dark-room should not have several lamps and an easy chair in which to read. If the light is as nearly non-actinic as possible, and if it is reflected rather than direct light, a great deal of it is permissible—always supposing we are not using orthochromatic plates. The real thing to guard against is undue exposure of the plate during development. To watch the picture coming up is very largely an amateur delusion and the frequent taking it from the developer and holding it to the light is even more so. With a good light a momentary examination is enough to show the density of a negative, and it does not need to be seen twenty times during development. Use plenty of light, as near safe as possible, and keep the plate covered up during development.

*Art Effects via Paper.* It has been said that some of the "art" photographs of recent years owe much of their soul and quality to being printed on platinotype paper of mature age and much careless keeping. Paper three years old is said to be in the ideal condition, and certainly some of our art pictures are like the wine of age—for they have "that musty flavor." But old, spoilt, damp platinotype paper can be utilized, and to give prints practically as good as new paper. Printing must be full in the sun; keep the frame full to the sun and leave it there a most unreasonable time—try three hours. A negative such as is preferred for usual platinotype work will give the best results with spoilt paper. The picture will fully print out, the deepest portions black, the high lights somewhat yellow. Place in a weak hydrochloric acid to clear the print, and the result will probably be entirely satisfactory.

*Large Sized Trays.* There is a plan for making large sized trays for developing bromide enlargements, which though old is not perhaps universally known. Make a tray of wood, preferably planed, and sufficiently strong to be quite rigid. Line this with smooth oilcloth, preferably the white kind often used covering tables. The cloth must be large enough to line the whole tray without any piecings or cutting, the corners being folded in. The wooly side of the cloth is glued down to the box and the cloth should be cut to slightly overlap the edges so that it may be fastened there by a row of tacks. If the box is sufficiently rigid such a tray will last for years. If, however, the cloth should in any way get cracked, a little paraffin wax, heated, will make it right.

*Seeing the Picture.* How many photographers there are who never seem to get out of the habit of seeing a picture only on their ground-glass. They must try first this pose and then that, and each pose must be examined on the ground-glass. The trouble is that instead of trying to see the character of the man they are trying to conform to a few conventional rules, such as "an aquiline nose in profile, a tip-tilted nose full face." H. P. Robinson expressed himself very clearly to the fraternity on this matter. Photographers would find it much more convenient if they would learn to see their composition in nature and refer to the camera only to

see that the right amount is included, the head in the right place, and leave nothing but the focussing to be done under the cloth. These operations should take as short a time as possible. Anything in the shape of flurry or doubt is distressing to a sitter. "It ought not to be necessary to say this but photographers sometimes take too much care, which often takes the appearance of flurry and of doubt. They must try this and try that; have practical demonstration in the camera of how the face looks in profile, three-quarters and full, and often feel it difficult to decide and must have another look, and all the time the sitter is tiring. All this deciding should have been done long before the customer sat down—long before she came in." It does seem a little unusual to digress against hard work, but mischief is done by over-fussiness. It is more a matter of doing work at the wrong time—doing it when the sitter is in the chair. It is not possible of even the best of photographers to always turn out good pictures. Sitters must be taken as they come, and some could defy all the cameras and resources of art in any attempt to portray them as either picturesque or beautiful. But however impossible his sitter, he at least need not waste his own and her time by examining poses on the ground-glass. Of course there are cases where the sitter suspects poor value, if posing and exposing are expeditious and business-like, but such cases are very rare.

A LEADING London daily suggests a tax of one or two cents on photographs. The tax would be payable by a stamp affixed to the back of the photograph or its mount, and the revenue raised would be used to meet in part the expense of the South African war. There is little probability of such a tax being seriously considered in British officialdom.

*Camille Silvy*—one of the earliest of photographers—was one of the men of a specialty. He had one size, one quantity, and one price. He confined himself to cartes-de-visite, supplying forty for $10. He had a curious rule, one which photographers of to-day would be only too happy to heed. He would not photograph more than forty sitters in one day. Another specialist was the great Adam Salomon. His picture was a fixed size, 8½ x 10½ inches—they had not learnt the art of trimming in those days. His price for a first print was $20, and if he did not think that a sitter would do him credit he declined to photograph him.

There is one thing which is always in season with most photographers—the question of insurance. Are you insured, and if not, why not?

The light in many a dark-room is less than one-tenth candle power—a good text by the way for some underworked New York freak legislator. An ideal and safe light for those who have electric current in their dark-rooms is a filter of potassium bichromate. Take two circular or other jars so chosen that one can fit inside the other and leave a clear half-inch between the two glasses. Fill this space with a 6 per cent. solution of potassium bichromate, and in the inner jar suspend a ten candle-power electric lamp. The solution is opaque to the blue and ultra rays, but almost totally transparent to the red and yellow. The result will be a safe light of intensity sufficient to read by. Keep the plate from the direct rays.

A correspondent writes: "Why must men be in such a groove? For the life of me I cannot understand it, probably because I am a mere mount cutter and not a photographer. I have just thirty-two cabinet portraits for which I have to make a cut-out mount and arrange them in it. Twenty-six of the portraits are identical in pose, lighting, and finish. Twenty-six faces will look out of the left-hand side of the mount and the combined result will be overpowering."

Our correspondent is right. We have often too little variety in our work. Julius F. Sachse long ago pointed out the same thing, and gave his view of the reason for it. "A photographer will occasionally get hold of a sitter with a fine characteristic head. He gets his subject into a position, we will say by accident or good luck, where the lighting will bring out all the striking characteristics; the resultant picture will

be all that can be desired, and prove a drawing card. Now, what is the result —for the next year or two, every sitter, male or female, from infant to patriarch, will all be posed in precisely the same light, angle, and position, no matter how unsuitable it might be.

"Then, again, this man's competitors, spurred on more or less by the free advertisements given, in the first instance, for the marked or successful portrait, will attempt to imitate that particular effect, which results in a decidedly unhealthy state of affairs, so far as the individuality of pose and artistic effects are concerned."

The single achromatic lens is by no means useless. A plano-convex lens with the convex side toward the sitter will work at full opening without any stop. Its covering power is, of course, very small, but it will take vignetted busts. J. H. Dallmeyer used to suggest for single lens landscape work to place the stop a little behind the lens. Architectural work can often be done with a single lens, and without any perceptible barrel or cushion distortion—vide the cheap camera work of some amateurs.

One of the most important details which helps successful portraiture is to let the sitter feel comfortable; especially let him feel comfortable so far as the light is concerned.

Too much care cannot be bestowed on the reception-room. Too often it is neglected, the furniture old, and the display of pictures never changed. It is possible to go to the other extreme and aggressively overcrowd. Especially is this the case with the display. Do not cover the walls with a crowded mass of work. A few choice examples, carefully selected and thoughtfully arranged, will be less likely to tire a prospective sitter and more likely to please.

We hear much about the necessity of using pure chemicals. The mistake is that we usually associate the advice with our visits to the store. But there is little danger of impure chemicals from the dealers compared with the dangers or impurity afterward. All developers are liable to deteriorate when mixed, or even when bulk is first broken. And if care is taken against these latter chances of deterioration there will be little need to curse the dealer.

"I had a most exasperating half-hour with a young lady recently," writes a photographer. "She just *wouldn't* look pleasant and I was in despair. At last I turned the conversation to *golf*, and soon got the desired pose and animation."

*Quite a little heap of clotted nonsense* is contained in a paragraph in a contemporary, where a writer directs drying out the hypo from negatives by exposing them to heat and rubbing the crystalline powder off the film with cotton wool. This same instructor of his craftsfellows goes on to observe: "Of course varnished negatives can be treated in the same manner when the hypo has forced itself through the film and varnish." Charity urges us to suppose that this is a piece of that delicate humor so dear to the heart of our contemporary. But it is surely unwise to give the readers the faintest ground for suspecting that the customary lofty standard of scientific accuracy is being for a moment lowered. A journal which can produce such an item as the following ought to jealously safeguard its reputation: "Unbroken chilblains can be cured by moistening them often with lead lotion (Goulard's water): this is poison, so must be carefully used—an ounce will be enough."—*G. E. B.*

*Formula for Success.* Of the making of formulæ there is no end, and yet of quite satisfactory formulæ there is a lack in some lines. The mistake is in wanting one formula to work in all cases. Take the case of depression in business, poor trade, nothing doing—whatever you like to call it. It has been talked about since photography was and the formulæ for its overcoming are numberless. But numberless formulæ are not what the unsuccessful man wants—he needs one good one. It may be advertising, it may be different prices, it may be some specialty. Let him think over many means, using brains and judgment, and having chosen the right formula let him straightway apply it.

SYLVIA LYDEN AS "SAPHO"

By Louis F. Jansen, Buffalo, N. Y.

PORTRAIT

By Louis F. Jansen, Buffalo, N. Y.

By LOUIS F. JANSEN
Buffalo, N. Y.

THEATRE ROYAL, VALLETTA, MALTA

By S. L. Cassar, Valletta

ENTRANCE TO THE HARBOR, VALLETTA, MALTA

By S. L. Cassar, Valletta

"AT HOME." PORTRAIT
By F. E. Turner

"STILL LIFE"
By F. E. Turner

A MEXICAN MAID

By Winfield Scott, Trinidad, Mexico

# OUR PICTURES.

SPRINGTIME.

*E. W. Clark,* *New York.*

WITH the coming of May the season of general photography begins, and we have varied our illustrations to suggest some of the lines of work appropriate to the season.

The place of honor, worthily, is given to Mr. George B. Sperry, of Toledo, who shows us in the portrait of his daughter the inspiration by which he has improved his work during the past year or two. Mr. Sperry has been a hard worker for years. His work as an officer of the National Association kept him back from the success in professional work which can only be gained by steady and persistent work under the skylight. Since he has been released, in part, from active share in Association work he has developed his business in an enterprising way, and to-day his studio is one of the most attractive as well as one of the most generously patronized photographic establishments in Toledo. His work is characterized by simplicity and directness; he aims to secure likeness and the natural grace of his sitter; and the children are his favorite subjects. Few men in the profession have deserved success more than Mr. Sperry, and we rejoice in the progress he has made of late.

The three poses by Mr. Louis F. Jansen, of Buffalo, N. Y., prove that the visitors to the Pan-American Exposition will be well cared for photographically. Mr. Jansen is another example of successful growth following hard work on legitimate lines. His portraits are recognized everywhere as being of unusual merit, and the public favor his work secures is well deserved.

The views of Valletta, Malta, are taken from a series sent by an old subscriber in that delightful island, and do honor to their maker, Mr. S. L. Cassar. Although known to travellers in Europe by his excellent views, Mr. Cassar is an equally skilful worker in portraiture, and has produced

much good work in that specialty. A believer in straightforward photography, Mr. Cassar is an admirer of the American school of professional portraiture, and has for years eagerly followed the progress made by American photographers.

Mr. F. E. Turner, who sends the still-life composition and an excellent example of at-home portraiture, is one of many skilled amateurs who find our pages full of interest. His work proves that he reads carefully and well.

Mr. Alfred Holden, of Philadelphia, a prominent worker in the Pennsylvania Convention this year, sends us a series of photographs of a child and her doll. We engrave three of them as offering a profitable suggestion to those who "make a specialty of children." The little glimpse of woodland and water by Mr. E. W. Clark is engraved simply to set our readers to thinking of outdoors, where there are lots of pleasures photographic and otherwise at this time of the year. As his work shows, Mr. Clark knows how to make the most of a simple subject, which is oftentimes a more difficult thing than photographing a scene rich in natural beauty.

THE LITTLE MOTHER.

*Alfred Holden,* *Philadelphia.*

## HOW TO HELP THE RETOUCHER.*

BY DRINKWATER BUTT.

In the previous article I pointed out that the "pure photograph" is not always all that we could wish, and that there is also room for improvement in the treatment it often receives under the name of "finishing," so in the present one we will consider some of the precautions which may be taken to minimize the amount of the latter which may be required. Among the principal defects that the retoucher is called upon to remedy are those arising from the unorthochromatism of ordinary plates. They are especially apparent in portraiture, in which any unequal coloring or pigmentation of the skin will show on the negative with much more distinctness than to the ordinary vision; and this is one of the causes why amateur portraits are frequently anything but successful, and why the worker often finds his friends complaining that he has made them appear as if unwashed and dirty.

It is also possible that the rather strongly tinted cheek, which in nature denotes robust health, may appear on the negative, by reason of its color, as if it were a shadow. This produces at once a hollow-

* The second of a series of papers published in *Photography* on "Retouching."

ness of face and a woe-begone expression that are possibly not characteristic of the original. It is said that this fact has actually been turned to account in photographs taken of the plaintiff in a case for compensation for injuries sustained in an accident; a fully retouched print being produced to show the individual before the occurrence, and a totally unretouched one to depict him afterward, a story which if not *vero* is at least *ben trovato*.

Another form of this trouble lies in freckles, which, being of a yellow color, are very non-actinic, and consequently appear as black spots on the print unless worked out on the negative. This is even the case with what are known as latent freckles, in which the pigmentation hardly shows through the skin to the ordinary vision, but is seen plainly enough on the photographic plate.

It is perhaps not generally known that bathing the face or rubbing it with a rough towel immediately before exposure, by bringing the blood to the surface, will equalize the coloration, and make the freckles less apparent on the negative, but neither the amateur nor the professional can always resort to this method, any more than he can always apply powder for the same purpose. It may be remarked that the rubbing process will necessitate a slight increase of exposure, and the powder method a slight reduction of it. In cases in which the incorrect rendering of color values extends to large surfaces, such as drapery, or portions of a landscape, one of the modes of working on the back of the negative, which will be described later on, must be used. It should also be remembered that this class of defect is always most visible in plates which have not received sufficient exposure, and so, under all circumstances, as full an exposure as the nature of the case will allow should be given, to lessen the retouching and finishing afterward necessary.

Care in all the processes through which the negative goes will lessen also the amount of work to be done upon it subsequently. Careless handling may abrade the film, or disfigure it with finger-marks; uneven flowing on of the developer or failure to rock the dish will cause markings which will be a good deal of trouble afterward to get rid of; while dust insures a crop of pinholes that will take a long time to obliterate.

To avoid these things, I advocate the use of distilled water for the mixing of developers, the filtering of both developers and fixing solutions to remove any particles of dirt or undissolved crystals, the use of a backing which will not go powdery when dry, one which can be entirely removed with a damp cloth before development, and the greatest cleanliness of hands, dishes, and dark slides on all occasions. A dusting out of the interior of the camera is an occasional additional precaution that might be taken more often than it commonly is.

Under no circumstances should the plates be dusted. This may seem somewhat paradoxical advice, but my own experience is that it is very easy, even with the softest of brushes or dusters, to scratch and damage a gelatine film in the obscurity of the dark-room, and that the action of brushing or dusting produces an electrical condition of the plate which makes it at once attract some of that dust which a chance sunbeam shows always to be present in the atmosphere.

My substitute for brushing or dusting is to hold the plate by the edges, with its surface in a perpendicular position, and to strike the corner of it sharply against the table or shelf, when any particles of dust will be at once dislodged. This plan I have followed for several years, and am seldom or never troubled with pinholes. I am also, of course, always careful to have the floors and shelves of my dark-rooms kept clean and free from splashings of solutions which dry up and crystallize, and so add to the quantity of pernicious dust in the air. I also take precautions to keep my negatives from dust while they are drying. The necessity of choosing a non-pulverizing backing has been above referred to, but it may be also added that the mere use of backing is in itself a preventative of some retouching work, which would otherwise have to be done. It is of the utmost use, both in landscapes and portraiture, not only preventing the wholesale halation, which so often destroys delicate trees and other forms seen against the sky, which often spreads the light of a white shirt front over the adjoining broadcloth, or the

shimmer of white satin over adjacent black velvet, but preserving the half-tones and high lights in white drapery, and the fine patterns in lace, which otherwise would need attention from the retoucher's pencil.

Now that we have such excellent preparations for the purpose on the market, to say nothing of ready backed plates, I think that no careful photographer, nor anyone who wishes to save retouching and other work on his negatives, should expose an unbacked plate.

The next class of defects to be considered includes those caused by incorrect or defective lighting. By the latter term, under-exposure is meant chiefly—an error which, even if the subject is correctly lighted as regards form and direction, will cause more retouching to be necessary than if a sufficient time had been given. In this connection it may also be noted that the so-called Rembrandt style of lighting usually shows up all defects very plainly indeed, so that when it is chosen plenty of exposure should be given, intensification avoided, and careful retouching finally resorted to.

To acquire a thorough knowledge of the effects of light upon form, and to understand the manner in which the incidence of it will conceal or exaggerate not only contours, but also surfaces, the student would do well to obtain and use as models a couple of casts—one of the head of the Venus of Milo, and the other of the well-known bust of Diogenes. By taking a few photographs of them under different effects of lighting, the student will not only learn a good deal about the art of lighting *per se*, but also get to understand the difference in the amount of the retouching which would be required, in the different cases, to soften shadows and join them up with half-tint to the high lights, and to take out the surface defects which will appear in varying places as the lighting is altered.

It would be perhaps asking too much that every photographer and every retoucher should go through a real course of drawing—first from casts of ornament, then from those of antique, and lastly from the life—but I can assure them that it would be of almost incalculable benefit. On the advantages that would accrue to their general art education and perceptions I will not here enlarge, but I can tell any would-be retoucher that the mere ability to finish a large surface and to give the modelling of a head from the cast in chalk will make the smaller work of ordinary retouching come very much easier to him; while at the same time he cannot go through such a course as that above indicated without acquiring a certain amount of knowledge of the anatomy of the human face which will be of the utmost service to him. As an assistance to the acquirement of this knowledge, he will also, in any case, do well to purchase and study one of the small anatomical heads published in plaster by Brocciani, by means of which he will at least learn to distinguish the forms caused by the muscles of the face and their actions, from what may be called the more accidental contours, and so not be liable to create the absolutely impossible effects one so often sees produced by retouchers entirely ignorant of anatomy.

## CONTACT COPYING OF ENGRAVINGS.

To make a negative of some old engraving, bound in some venerable tome, is often a task of trouble and of considerable delicacy, so much so that the trouble, if camera copying is resorted to, is more than the resulting advantage.

It is therefore worth remembering—what is by no means new but what is often forgotten—that a paper negative can often be made by direct contact without using the camera at all and of a quality equal to and in some respects better than a glass-supported negative produced in the camera. The paper to be used is any glossy bromide paper or some slower paper, such as Velox. Lay a piece of this sensitized paper under the print, the face of the print to the coated side of the paper, and cover the back of the print with a sheet of heavy plate glass to ensure absolute contact. The exposure should be to diffused daylight and may vary from thirty seconds to one min-

ute or even more. After exposure the paper should be well soaked in water and then developed with some non-staining, non-fogging developer mixed to the strength ordinarily used. The addition of a little potassium bromide to the developer will be an advantage. The developer we prefer is amidol, and development should be slow and gradual and without any attempt to force matters, which would prove fatal.

If the original engraving is not time-stained or in any other way unevenly marked the paper negative obtained in this manner should prove superior to a camera-made one in its clearer lines, and this more noticeably in the finer and more delicate parts of the engraving. The tendency to fill up or clog is a very real one when engravings are copied in the camera. This is due in part to the spreading tendency of the developer in the film, but is also in part due to reflected light on the surface of the print itself during exposure. The ink surfaces of an engraving are by no means dead black, and the light reflected from them tends to weaken their intensity and by a kind of halation give the blurred effect. Indeed, given a fairly good ink on a good quality of paper which is not stained, a negative by contact should be fully as good as any one which could possibly be obtained in the camera, and at infinitely less trouble.

It must not be supposed that this plan is merely a makeshift to save trouble; it is a good practical method. We have recommended bromide paper as being the rapidest method of procedure; but there is no reason, as far as quality is concerned, why any fine-textured printing-out paper should not be used. Some of the finest negatives we have ever obtained by this method were made years ago and were on albumen paper.

## AN AMATEUR SIDE LINE.

BY CHAS. R. ANSELL.

In all our larger cities the photo-supply stores do much for the amateur beyond selling him plates and chemicals. The amateur is so prone to get "stuck," or to want something which it is beyond the power of his skill or apparatus to produce, and then he naturally turns to his dealer. "But the amateur is such an unmitigated bore," says one. That may or may not be. There are amateur bores as there are, doubtless, bores in the fraternity, but the amateur as a class is a money spending fact and if there is anything in him he should be worked. The amateur is innocent of any fixed intention to compete with the professional, nor does he in the main do so. Very probably, take him all in all, he helps more than he hinders. In the large cities the amateur is in the hands of the dealer; and the photographer—at least the successful one—needs him not. But in the smaller cities, where the amateur is not so well looked after, the photographer has often spare time, and inclination to add to his income in any legitimate manner. A few years ago Wilson's urged all photographers in small cities to seriously consider the question of becoming dealers. It did not urge indiscrimate opening of stores, but did suggest that such a move was worthy of careful thought. The reasons for such a venture are twofold. First there is, or should be, a direct profit from the sale of merchandise, and second it prevents someone else taking the supply field, and eventually encroaching on what is more legitimately the photographer's own ground. A number of photographers actually did become dealers, in response to the suggestions made, and on the lines given, and I believe that almost all of them are glad that they made the move.

The value of the amateur lies largely in the fact that the one who will make use of the photographer's skill and experience is the more wealthy (and more reasonable) one. The man who wants a cheap 4 x 5 camera and sells portraits to his friends for a trifle over cost, and (usually though not always) for as much as they are worth, is of course not worth any consideration except as the purchaser of an occasional

dozen of plates. But the amateur who buys a good camera and tries to make decent pictures is open to spend good money for developing and printing; and if he does this himself he is ready to buy skill in sundries, such as spotting or retouching, and to pay for it.

Speaking of developing, has it ever occurred to you that the average trade developer—some clerk in the supply store—treats amateur exposures with a weak-minded contempt? He knows that some inexperienced amateurs make wild shots, and as he is used to turning out spoilt plates, the average clerk spoils many plates that the photographer has exposed reasonably correctly, and as soon as an amateur is at all advanced in his work he "does the rest" himself simply because he has found this out. The photographer who developed plates with care, and would give a few moments of tactful suggestion when delivering faulty negatives to Master Inexperience, would not only tend to cure Inexperience, but, what is more to the point, would keep his trade.

The especial side line of which I was thinking when I commenced this article is copying, including enlarging. It is one of the many things which is strictly and legitimately photographic; that is a man need not be a dealer or run a store in order to undertake it. All amateurs are pleased to hang their productions on their walls—proud to do so. And as few amateurs work in large sizes there is much room for enlargements. Not necessarily enormous ones, though some may wish an enlargement of many diameters on some rough paper; but for the most part pictures from 8 x 10 to 12 x 15 in size will be in most demand. Single bromide enlargements, plainly mounted, could be supplied at from forty cents to a dollar and leave a reasonable payment for time. A bromide enlargement properly made is a very beautiful thing. Some perverse fate has decreed that the average man should try his utmost to turn out poor careless work on bromide paper. He does not seem to have grasped the fact that results indistinguishable from platinum, and from several other favorite processes, are obtainable on bromide. Bromide paper is utterly undeserving of the way in which it is too often treated. Handle it sensibly and with just reasonable care, and bromide paper will treat you well and bring more orders. The copying is a line which should bring in returns. How often I have been asked about reproducing one head from a group, or making a moderately sized enlargement from some negative or old glass positive. There is no reason why a photographer should not redeem, from some poor amateur negative, the portrait which cannot be repeated. He is not either cutting his own throat or going over to the enemy. Do not let him ask a fancy price, and above all do not let him do the work for *less* than it is worth. The person requiring the work will be willing to pay the price if it is agreed on before starting. There is much copying, of very small or very faded work which may require much care; perhaps two or three negatives and positives, or possibly an enlargement, carefully worked up, and then re-photographed.

The man in the small town who cultivates the amateur will find that there is good money in him which he is prepared to spend for honest value. And in the versatility of his work, and the varied channels in which it can be placed, is one of the photographer's surest safeguards against possibilities of disastrous times.

## PEN PICTURES OF CELEBRITIES.

BY A. G. MARSHALL.

### I. JOHN L. STODDARD.

THE illustrated lecture field lost its biggest and brightest flower when John L. Stoddard retired two years ago, full of honors, though not of years. Without a doubt he entertained more howling swells and ameliorated the rigors of the lenten season for more religious matinée girls than all the other fellows whose full-dress shirt fronts nightly gleam in the calcium's glare.

Several years ago Mr. Stoddard sent me an invitation to meet him in the green-room of Daly's Theatre an hour before his lecture, with some of my colored lantern-slides. A perfectly appointed carriage—none better in the city for hire—was turning away from the stage door as I pressed the button. Everything that this king of lecturers did was in bang-up style, as might be expected where the cost of a seat to his show would scarcely have been sneezed at by Patti herself.

He met me with just the proper blend of warmth and simplicity—and did not use a society handshake. It was a toned down college society grip—cordial and fraternal. His figure, of medium size, was as nearly faultless as one often sees; his dress was absolutely faultless, and his presence and manner were princely without swagger. He would "take" well photographically as well as socially at any angle. Nature did much, culture did more, and hang the expense completed the job of putting John L. Stoddard at the head of "Lenten Attractions." Magnetism and enthusiasm, trained into perfect art, infused his discourse with a dramatic sense never reached by any other man in describing dissolving views. Your interest was chained by his narrative, and the pictures just happened along to fit the images already called up to the mind's eye.

The same enthusiasm was in his conversation. If he remarked on the weather the clouds and winds took on an intensely personal interest to the listener. He made you feel of some consequence yourself, too, which is a secret of popularity that many greater men have never discovered. He exclaimed over my work in terms that I flatly lack the cheek to record, and promised me some substantial commissions.

Before facing the audience he assisted the dramatic unities by a little "make-up." A chamois chest protector in two flaps attached to the lining of his waistcoat, covered his shirt bosom like the doors of a triptych painting. This ingenious device was tucked back out of sight, and before the mirror a touch of rouge was placed to relieve the classic paleness which might have become ghastliness under the white beam of the lime-light. Then, after a little sip of wine of coca to tone up his vocal cords, or, as Mr. Wegg would say of a stronger potation, to "meller the organ," he was ready to "go on."

The beautiful entertainment that night was on Japan. I took it in from the coign of vantage of the lantern operator's side, and the charm was not in the least impaired by my view behind the scenes.

It has been said that beside "living high and feeding soft" at the most expensive caravansaries in the world for years, Mr. Stoddard stowed away a million dollars "rake-off" from the platform, beside retaining valuable royalties from the sale of his books of travel. I hope he did—we need an outpouring of grace and scholarship among our millionaires.

## BUTTON PORTRAITS.

An old and valued reader of the Magazine writes us a long letter in which he urges that the penny portrait should be advocated as a means of bringing prosperity to photographers. We fear we cannot agree with the suggestion. In the first place, fortunately, the fraternity is not in urgent need of a prosperity bringer; for, on the whole, prices are fair, good work is appreciated, and there is a fair quantity of it.

We have more than once referred to button pictures, stamp pictures, penny pictures, and the like, and we have suggested the addition of a Klay's multiplying holder to the studio furniture. Very many men have taken up the idea and have made much money by it. It is very easy to demonstrate by figures that stamp portraits are a little gold-mine. Says the enthusiast, "You can make a score of portraits on one 5 x 7 plate, and print them all together on one sheet of paper." This is true, but on a similar basis any branch of photography can show golden results on paper. And stamp portraits, properly worked, have proved remunerative in some hands. But the most successful man has been the one

who sacrificed all his business to the stamp or button craze, and of course as soon as the fashion waned he had to begin anew on some new line. We have no wish to decry buttons; they fill a legitimate and vacant niche in the economy of things photographic; but to advocate them as a panacea for all ills, or even as a line widely advisable, is not calculated to advance photography.

Photography in America has gained its position by steady advancement. To revert to button pictures is often retrograde travel on the basis of coupons or cut rates. The true way to advance is to keep as far as possible to the larger sizes—by which we mean keeping as near the cabinet size as possible for regular work. The old carte-de-visite was ousted by the cabinet, which was an eminently proper move. The cabinet proved, however, too large for some purposes, and so a new size, allowing much latitude—the midget—was introduced. This is surely sufficiently small for any but an exceptional trade, and is too small for some fortunate or able men. To make the midget a universal standard would be unwise; to make the stamp a standard would be foolish.

Here is an old friend—or enemy—in a new guise; we find him in the columns of a daily paper: "Photographers have discovered a new method of treating paper with chemicals in such a manner that it can be stretched at will after the picture has been printed upon it. This stretching of the paper achieves wonderful results; round, chubby faces are made oval and spirituelle; and several inches of stature may be added to a figure. The results obtained are eminently artistic." Good for the lay press.

Keep your brain busy at your work. "Thoughts shut up want air and spoil, like bales unopened to the sun."

"Thoughts are things," and beautiful work may be produced by proper thinking.

## PRACTICAL METHODS AND FORMULÆ.

*A metol-hydro developer* for bromide papers is a two solution one, as follows: No. 1. Metol, 2 drams; hydroquinone, 30 grains; potassium bromide, 15 grains; sulphate of soda, 1 ounce; dissolved in 10 ounces of hot water. No. 2. Carbonate of potash, 1 ounce; sulphite of soda, 1 ounce; hot water, 10 ounces. For use take 3 parts No. 1, 2 parts No. 2, 3 parts water. If the negative is extremely thin very slightly increase the proportion of No. 1, and do not add the water. The old, mixed solution may be kept for over-exposures.

*An ink for writing on glass* is made of 10 parts of white shellac and 4 parts of Venice turpentine, dissolved in 15 parts of oil of turpentine and thickened with 5 parts of lampblack.

*When a bromide print hangs back* locally during development a method of forcing matters is to use a small glass syringe with which to direct a jet of the developer on the backward part.

*Steam* may be used to fix pencil or crayon work on bromide prints. The jet may be obtained by fixing a rubber tube to the kettle spout. The steam, very carefully applied, softens the gelatine surface and the powder amalgamates and gives a surface the texture of the gelatine. Needless to say care is necessary or the work will be overdone and the print spoilt.

*Never use hypo* freshly mixed. Freshly mixed hypo is colder than the room in which it is mixed, and a little warm water should be stirred in, just enough to take off the chill, or the hypo should stand a few hours in the room. To put plates from a warm developer into a cold hypo bath is very liable to cause frilling.

Oil paint for backgrounds may be rendered flexible, to allow of the background being rolled, by the addition of a little soft soap. Dissolve one ounce of soft soap in six ounces of boiling water and work it well into three pounds of ordinary oil paint.

# PHOTOGRAPHY AT CUSTOMERS' HOMES.

BY ALFRED WILKES.

"I AM great on chairs in my studio," said a well-known photographer recently. Therein he showed the result of a common experience. We are apt to consider a chair to be a chair and nothing more. As a matter of fact there are chairs and chairs. Some people will think of the great lounging club chair as the acme of bliss; others delight in the low wicker rocker. Some people sit low, others sit high, and almost everyone consciously or unconsciously has a favorite chair and position. By having a number of chairs of various heights and degrees of comfort my friend could generally manage to settle his sitters into some comfortable unrestrained position. In deciding on unconventional chairs the photographer made a step from that quaint fairyland which we all know so well; that land whose exotic palms grow from ninety-cent vases, standing on gray time-worn mediæval stairs; where ladies in evening dress sit erect and alert in red plush mahogany chairs, in the middle of an autumn landscape; where everyone is clothed in their Sunday best and a painful stare — in brief, the land of the accessory.

There is scarcely a professional photographer who has not been asked, at some time or other, to photograph some person at home. I do not refer here to the aged or the invalid, but rather to the person who has no particular love for the convention of the studio and its accessories. There are few people of wealth who have not a home in which photographs may be taken as well as in the average studio. Certain it is that if a photographer qualified himself for this class of work he would find the commissions coming to him. There is no doubt that most people are best represented in the midst of a wealth of accessory. I know this is rank heresy and so I will explain that I do not mean *studio* accessory. Take a person in the surroundings of their own homes. So many people—that is educated people—do not care for the photographer's furniture. They have no objection to their own furniture. But then they cannot cart their furniture to the studio, and so the studio camera must perforce be taken to them. And think, too, of the incongruity of a pose in the studio. A sitter might bring his own chair, but what about his tables. And if the table were taken, what about his carpet, and his wall-paper, and the candlesticks on his mantel-piece. And what—most important of all—about his peace of mind. How can we get naturalness in a studio? It must be difficult for we so seldom do it. The most inexperienced among us know how much surroundings affect a person. Change of scene is a favorite prescription of physicians. The ability to take a sitter out of his painful self-consciousness is one of a photographer's most valuable assets—we often speak of it as tact—valuable in proportion to its completeness. Where we cannot avoid a strained expression we try to retrieve ourselves by pretty retouching, and so emphasise our own condemnation.

We are apt to give too much prominence to the portrait; the new school is beginning to discover that the person is often better than the portrait. And it is the person—the personality—that we endeavor to obtain in at-home work. We make our portraits too big. A portrait may be small, provided it has the right setting. Let us photograph our sitter in his study, or in her boudoir. Represent the child in his nursery or the girl at play. We have heard—perhaps more than enough—of the art of "not posing." Something like it will be feasible in homes, as concerns both pose and accessory. Chairs may be moved a little, but on the whole the furniture will have its own positions. And the pose will be a natural one.

There is one important fact about at-home work. Every house is a separate studio and presents fresh problems. Houses are not built with a view to obtain a photographer's light. Hence it is infinitely more difficult than studio work. But it is not impossible work, it is work to delight the

heart of the true lover of photography, and it is remunerative work. Every subject will require its own solution. I have seen lovely *snap-shot* effects of children playing in front of a large window and ideal "at-home" poses taken in ten or twelve seconds. But to be successful the worker must be a master of flash-light. Not merely an experimenter, but a master. He must be able to decide just where to place his lamps, how many of them, and how much powder. You cannot afford to make trials with paying sitters. The difficulties of windows and mirrors must all be thought out and got rid of previously. And if there is a suspicion of hardness of face in the negative it must not go forward into the print. It must be faked until the print is perfect—if that is possible. So the man who wishes to make a specialty of at-home work there is a profitable field. But it must not be a question of "how cheap," but "how good." At-home work is not $5 per dozen, nor yet $10; though occasional work, added to the other specialties of the photographer, may pay at these prices. It all depends on the man and the place. But the *best* work must be more on the Hollinger method, at so much per print. Every print must be perfect, worth a good price—and must fetch it.

## "TO SAFEGUARD THE INTERESTS OF PHOTOGRAPHERS."

SUCH is the brief but comprehensive way in which the "Professional Photographers' Association of Great Britain" defines its reason for existence.

The photographers of the British Isles have long groaned under a score-and-one more or less exasperating conditions. Though they have groaned in unison they have protested as individuals, and have long felt the weakness that comes from lack of union. At last the final straw has been added, and, to mix the metaphor, the worm has turned.

As we have already briefly noted, certain English national advertisers are offering cabinet photographs as premiums. Sundry coupons, together with sixty cents and a photograph, are to be sent to them, and they in return send a dozen mounted cabinet prints—bromide prints. Naturally this is a serious hit at photographers, especially at those smaller men in the country towns, and it has called forth much vigorous protest. This protest gradually took practical form in the shape of a meeting of London photographers, called to discuss some united mode of action. The chair was taken by our confrère of *The British Journal of Photography*, Mr. Thomas Bedding, but apart from him the hundred who put in an appearance were all directly interested in the production of professional portraiture.

In a long and able summing up of conditions the chairman pointed out many difficulties which beset the photographer, and some at least of which might be overcome by united action. Photographers on this side who take (or don't take) an interest in copyright and similar matters can sympathize with our British brethren. Among the things suggested as coming within the scope of a united body, the watching of legislation, local and imperial, was emphasized. The factory act, which regulates the hours of assistants; the question of fair and reasonable insurance; a strong benevolent association, and the ownership right to the negative were all mentioned. Apprentices and employés were referred to and then came the rather delicate questions of price-cutting and of commercial honesty—such as calling a bromide a platinum. Finally, when it was pointed out that the photographer had to pay full, discountless, retail prices for everything, even when he wished to become a dealer, and that other oppressions were "too numerous to mention," it was felt that a strong case in favor of union had been made out.

It was stated that the photographers of London numbered some 300, and of the rest of the country about 4000. The meeting, with the exception of some dozen or more persons, was composed of London professionals. These practically resolved themselves into a local "chapel," select-

ing twenty-six Londoners to form a temporary committee to undertake the preliminary arrangements of rules, officers, etc. It is suggested to form a central union in London and provincial ones in as many cities or districts as proves feasible. The provincial associations will be represented on the London committee by two of their members. It is hoped that by this means the whole country will be covered by a strong body ready to unite at any time or in any district for vigorous action.

In its first inception the Professional Photographers' Association seems to have a strong measure of support. Of the need of such an Association there can be no two opinions, and we sincerely hope that our British brethren will not rest until a really strong union is an accomplished fact.

## ABOUT BUSINESS LETTERS.

THERE are two ways of doing business: by word of mouth and by writing letters. Each method has its partisans, and each can, no doubt, argue very cogently on the respective advantages of the two methods. There is one class of business men, shrewd and cautious to a degree, and of wide experience of men and things, who will advise you that all business should be done, wherever possible, by personal interview, and never by committing yourself to writing. The other class, who, it must be granted, are progressive, successful men, careful and methodical, and probably equally as shrewd as the other, advise that all business transactions should be in writing, personal interviews being always confirmed by letters. There is a good deal of ancient wisdom in the former course, and we will concede that where the interviewer possesses those rare qualities which should distinguish the true "ambassador of commerce"—the gifts of suavity, tactful push, and that thorough principle which will prevent him from inveigling a customer into a bad bargain—there is nothing to be said against it, except that it is a wise precaution, even in such a case, to confirm transactions by letter. So long as human nature is human nature we suppose that personal persuasiveness will be a great power in business, yet we would rather see all business done by correspondence if it were possible. It would be the most simple and straightforward method. The old way of doing business orally can never rise very far above the haggling of the market place, or the huckstering of the peddler and the "Cheap Jack." There is to our mind something too often reminiscent of the low cunning of the savage in the class of business which depends on personal persuasiveness. Men are selected who are gifted with a glibness of tongue and an oiliness of manner which are too often associated with insincerity if not downright untruthfulness and dishonesty. Bribery and corruption, lying and chicanery, deception and intrigue, flourish where business is done by word of mouth instead of by correspondence. It is the business of the street corner and the bar-room, and is equally as degrading to the seller as to the buyer; such business as would besmirch honest white paper.

By all means let us have business by correspondence if it will prevent this trafficking with conscience. Men are more careful in what they put on paper than in what they say orally. But it is not always the saying that brings about the doing of unprincipled acts. A nod or a wink, a smile or a shrug, an exhibition of the palm, and the chink of a coin are the only tools and stock in trade with men who prefer to do business without correspondence.

Whatever disadvantages there may be in doing business by correspondence, there can be no doubt that great and solid advantages outweigh them, and there are, after all, many circumstances in which business can be done only in this way. Even where the alternative offers of doing business by personal interview or by writing we are prepared to maintain that the latter is the preferable course, unless one is very sure of the man to be sent as interviewer.

Concurrent with the growth of the typewriter there has sprung up a tendency to

study the form and style of business letters, and it is a pleasure to note that commercial correspondence is a part of the curriculum of the schools, polytechnics and evening classes. That there is need for such instruction must be obvious to every business man who reflects on the style of the bulk of the letters he gets by his morning mail, or who ponders over the blunders of his own clerks, who have let him in for many a trouble by writing badly worded or indiscreet letters; nay, more, does he not recollect his own early follies, leading to bitter experiences costing him not only hard cash out of pocket but sleepless nights and racking worries by day? How often has an ill-considered letter cost the patronage of an old and valued customer or entailed considerable pecuniary sacrifice besides loss of self-respect and dignity! How often has a thoughtless word or phrase led to a disastrous law suit, or has involved an issue which had to be compromised at great loss!

We do not know what form instruction in business correspondence takes in the schools, but we hope it is not simply the cultivation of a graceful style which, however desirable, does not include all that is necessary in the characteristics of a business letter. To be able to write a letter which shall state a fact precisely and concisely, and in a manner such that it cannot possibly be misconstrued; a letter which can neither give offence nor provoke mistrust; and a letter which shall be firm where firmness is needed, conciliatory where such a course is requisite, yet courteous and dignified withal, is a greater art than the writing of a book, and the man who can always write the letter to suit the circumstances is a man deserving to be honored and to take rank amongst the nobility of commerce.

Young men who are just entering on a business career cannot be to strongly impressed with the importance of correct letter writing. So many men who get into business "put their foot into the ink pot" as soon as they take the pen in their hand and wreck a promising career at the outset. Technical and scientific knowledge, the command of other languages, a mathematical accuracy of reckoning, a literary style of composition, even the faculty of great industry and intense perseverance will not balance the scale against the ability to write a common-sense business letter. Letters travel further than the sound of the voice or the sight of the countenance, and it is desirable—nay, absolutely necessary—that they should convey no incorrect or unfavorable impression.—*Penrose's Process Work.*

## A TRADE BRINGER.

BY E. STANWAY.

I AM in a small country town of about 3000 people. This may seem a nice little size to many people, but unfortunately everybody drives into market every week to the county town where there are 7000 people and three photographers. They are always cutting rates there or giving coupons, and they take much trade that should be mine.

I often take your hints that you give in the MAGAZINE, and I must tell you about the last effort I made because it paid well and only cost ten dollars besides my time which counts for little. I have been going over all my negatives and very carefully choosing a number of likely ones. Being in a little place of course I know everybody, and so I was able to decide who were the best people for my purpose.

I made nearly 500 prints, using Aristo self-toning paper, of as many different people, and sent them around, carefully finished and mounted, to the people they represented. I had 500 circulars printed and this is what they said:

"Dear Sir (or Madam): I have just been sorting over my stock of negatives, and among them is the one from which I have made the enclosed print. As the work which I am now doing is (thanks to improvements in the making of photographic printing papers) better than any previously turned out by me, I write to ask if I may not receive an order from

you for a further supply from this negative. My prices are for 12 carte-de-visites $2, for 12 cabinets $4, or by the well-known and artistic permanent platinotype method $3.50 or $5 respectively.

"I am daily at my studio from 10 A. M. to 6 P. M., and shall be pleased to receive your orders or to make appointment for a new sitting for yourself or any of your family or friends. My price for photographs from special sittings is carte-de-visites, $2.50 per dozen; cabinets $4.50 per dozen."

By sending out 500 prints I reached every family who had ever given me a sitting; fewer prints would have done so, but to several I sent two or even more prints from different negatives.

At first I began to think that the effort was a failure because I expected a result right away. But after three or four days I got an order for a dozen cabinets, and after that I got an order nearly every day for a fortnight. The print having gone out with the letter and being kept by the people, kept them reminded of me. I traced quite a number of sittings to the effort, and altogether it paid me well. The only expenses were the paper, the mounts, a dollar for printing, and about a dollar for mailing. My children delivered most of the letters and that kept the mailing expense down.

---

THE late William Morris, poet and artcraftsman, made intelligent use of photography in his designing of letters based on old models. He enlarged the various letters, on which he had his designs, several diameters and then drew his new creation still larger, when to his satisfaction it was photo-reduced to the required size.

THE summer season will soon be here, with its seaside or country season, and its —freckles. The retoucher removes many freckles, but the careful operator keeps many of them from the negative. There are several ways of minimizing freckles. The negative must be soft and full of detail, and the lighting, too, must be soft. Any underexposed or hard negative is fatal to best results. The use of orthochromatic plates is, of course, a necessity. If the sitter will sponge her face with warm water and dry it with a rough towel it will give a heightened color into which the freckles will merge and render retouching easier.

## TRANSPOSING FORMULÆ.

BY C. WELBORNE PIPER.

BEFORE considering the arrangement of developing formulæ, it is advisable to give some attention to the methods of transposing formulæ from the metric system to one of the English systems of weights and measures, or *vice-versâ*. There is, of course, no difficulty in transposing formulæ made either entirely by weight or entirely by volume—it is simply a matter of substituting one unit for another. Or, again, with standard solutions by weight and volume, there is no difficulty in transposing grammes and cubic centimetres into avoirdupois and fluidounces, which operation, as before explained, may be said to give a solution of practically equivalent strength, if we disregard the subtle differences due to the varying standard temperatures. The trouble is to satisfactorily transpose formulæ in metric standard weight and volume and equivalent formulæ expressed in English nominal weight and volume, for we cannot exactly transpose grammes and grains, or cubic centimetres and minims without introducing complicated fractional quantities. Take, for example, the following formula, given in metric measures, in column A:

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Pyro . . . . . | 5 gm. | 5 oz. A. | 2.1875 gr. | 2.192 gr. | 2.4 gr. | 2.5 gr. |
| Soda . . . . . | 40 gm. | 40 oz. A. | 17.5 gr. | 17.538 gr. | 19.2 gr. | 20 gr. |
| Water to . . . . . | 1000 c.c. | 1000 oz. f. | 1 oz. f. | 1 oz f. | 1 oz. f. | 1 oz. f. |

If we consider a standard solution to be of the same strength, whether made by metric or English measures, then the formula in column B, expressed in avoirdupois and fluidounces, is equivalent in strength, though not in total quantity, to formula A. If, then, we reduce these avoirdupois ounces to grains we can obtain formula C, in grains per ounce of developer, and still of equivalent strength to formula A. The awkwardness of the proportions of solids to total volume is apparent, and no improvement is made even if we transpose formula A into the strictly equivalent formula D, which is arrived at from the published tables of standard equivalent quantities, and allows for the variation of standard temperature. Incidentally we may note the very slight difference that exists between formulæ C and D.

If next we try another method of conversion, transposing grammes into grains, and cubic centimetres into minims, and reducing the total quantity of 1000 minims to one ounce, we have formula E, which is obviously less dilute than either C or D, though the weights of the solids bear the same relative proportions to one another. Here we still have an inconvenient formula, not in any degree better than the others, and less accurately equivalent.

We now can try a final variation. Again convert the grammes into grains and the cubic centimetres into minims, but deduct 40 minims from the total of 1000 minims, and so reduce the number to 960 minims, or exactly 2 ounces. Then, halving all quantities, we have the very simple and convenient formula F, which is only very slightly more dilute than E.

If we make up 1 ounce of solution exactly in accordance with formula F, and then add 20 minims of water, the strength of the result is exactly equal to that of formula E. If then we again add about 47½ minims, the result is equal in strength to formula D, or the original formula A. The difference between formulæ E and F is practically negligible, for the addition of 20 minims of water to an ounce of mixed developer cannot affect the resultant developed image. Experience shows that the only result of slight dilution is a prolongation of the time of development. The gradation of the image is not affected excepting by excessive dilution, say to the extent of doubling, tripling, or quadrupling the total volume of the developer. But while the effect of an additional 20 minims, or even a drachm of water, on gradation (if there is any effect) cannot be detected, a slight variation in the relative proportions of the pyro and soda may have marked effects; hence, in translating a development formula from metric to English weights and measures we should carefully avoid altering the relative proportions of the ingredients to one another, but may, with safety, slightly vary the dilution to obtain a convenient formula.

The method by which formula E is arrived at not only leads to an unsatisfactory result, but is more complicated than that required to produce formula F. The original formula A shows a total quantity of 1000 c.c., and it is recommended that all metric formulæ should be written so as to show an equal total quantity, for this enables us to readily compare different formulæ, and to see the percentage quantity of each ingredient, and, the metric system being purely a decimal one, throws no impediment in the way of making up smaller quantities. English working formulæ, on the other hand, are best expressed in grains per ounce, as shown in formulæ C—F, and while E can only be derived from A by the aid of a certain amount of figuring, F can be directly written down by the simple expedient of turning every 2 grammes into 1 grain, and 1000 c.c. into 1 fluidounce.

Formulæ C and D can only be arrived at by calculation, either with or without the aid of tables of equivalents. D is equivalent to F *plus* 67½ minims of water, but the difference is only one of dilution to a small extent, and is, for the reasons already given, of little, if any, importance with a developer. It might be of serious importance in a delicate chemical reaction of a different nature, but for such work metric measures are generally used, and the complications introduced by the exact transportation of formulæ are avoided. For operations such as developing, toning, intensifying, etc., the method of translating exemplified in formula F is quite sufficiently accurate (though it might not be advisable to adopt it with an emulsion

formula), therefore, in considering the subject of developing solutions this method of translating will be adopted.

A study of the various published developing formulæ will show that in many cases a fairly convenient original formula is converted into a very inconvenient one as the result of translation. Sometimes this is due to literal translation, as shown in formulæ C and D, and in others it is due to the adoption of the system of converting grammes into grains, and cubic centimetres into minims, as in formula R, a process that gives neither a literally correct nor yet a convenient result, and is, therefore, not in any way to be recommended.

It should be obvious that solutions made from a formula specifying *parts*, instead of definite weights or volumes, must vary in their degree of dilution according as we turn the parts into metric units or English units. Very frequently such formulæ do not even distinguish between parts by weight and fluid parts, and there are also formulæ to be found expressed in ounces without any intimation as to whether avoirdupois or troy ounces are intended, or when fluidounces are meant. All these slovenly methods of writing formulæ should be strongly condemned, but they are far too often adopted, and there are too many formulæ extant that are obscure to all but their inventors.—*Amateur Photographer* (*London*).

## TACT.

BY JAMES ENOS.

As WILSON'S has been my most useful helper during the eight years I have been in business I think I may reciprocate a little by telling its readers how I first got my start and perhaps one or two other things which may occur to me.

Ten years ago I was working for a man well known to many photographers of twenty years ago, though less to those of my generation. He was a bluff, brusque, old-fashioned fellow, doing good work and with a good business, but quite a martinet in his dealings with his customers. All his photographs of children suggest that his little sitters were frightened, but as those days were before child portraiture had become a known art the pictures pleased and satisfied the parents. One of his peculiarities was a determination to "stand on his rights" as regards proofs, resittings, etc., and I have known him lay down the law in a peremptory manner which almost brought tears to the eyes of some fair sitter.

I worked fairly hard while I was with him and read as carefully as I could all the photographic books I could lay my hands on. How I did muddle my poor brains by poring over—late at night—the wisdom of Burnet's *Art Essays!* Perhaps it was the reward of my diligence which made it possible for me at the end of two years' service to consider a business of my own. The decision was in a measure forced upon me, for one day I went as usual to work in the morning and before evening I was most ignominiously bounced. Looking for another situation was a short task. There was one other photographer in the town, and business with him was so quiet that he had become a shoemaker to fill in his time. I did not wish to leave home and I did not wish to leave photography, but I had nothing on which to start a business except sixty dollars and an old camera.

I can scarcely imagine, after a lapse of eight years, why I was so moderate and sensible in my commencement. I did not make too heavy a plunge at first, for I carefully kept out of debt and tried as far as possible to get a guaranteed income outside my business. I wrote down to Zimmerman's and told them just how I stood, and they made me a selection of stock, including a second-hand lens—of no known name, but one which did the work—plates and chemicals, which cost me $45. I patched up the old camera as best I could and built a studio of half-a-dozen poles cut in the woods, covered with one or two old sheets to act as screens. This was erected in the garden behind the house, and after the wind had blown it over a few times I grew wise and took it down

every evening. I got work in one of the grocery stores every night from six to nine, that brought me three dollars a week, which I turned in at home toward my board.

But that is enough of my commencement. I had often felt as I heard the old man lay down the law that such a place could scarcely please the customers. They did not like dictating to. I was sure that the shoemaker photographer did very bad work, and I knew that I could lead him in quality as much as the old man could beat me. I charged $1.25 for cartes and $1.75 for cabinets. But as my camera would only take a 4 x 5 plate the cabinets were all vignetted and either size could be printed from the same negative. All my advertising was done with time instead of money; that is, I wrote letters or called to see people. I soon began to get a few callers from the poorer people in the town, and I strove in every way to make my makeshift studio agreeable to them. I had had an object lesson in my old situation and I was careful to use whatever tact I possessed to make a different and more favorable impression. Perhaps I was a little economical in the use of plates, but their cost was a consideration, and possibly it made me more thoughtful before exposing. I made it a rule to retouch and finish proofs. This was partly because I needed practice, and so I was really teaching myself, and if any sitter was not satisfied I was always ready to repeat the sitting. I found that by always trying to be obliging I pleased my customers, and after twelve months' work I had got a camera and lens which would take 8 x 10 groups and I was helping a joiner to build me a little studio. By that time I had left the grocery store.

I often hear people say that no one has a chance nowadays, and on the other hand I hear that so many incompetent people are coming into the fraternity that prices are cut to death. I suppose I was one of the incompetents, but whatever success I have achieved, except what has come from my own hard work, has been due to the mistakes of the other photographers. One gave me an opening because he lacked tact and the other because he was a poor workman. I believe the young man or young woman has as good a chance now as ever. If only a person will very carefully count the cost before beginning and will do their very best work all the time and be tactful they should succeed. I attribute much of my success to the magazines. I take four American ones and one from England. From them I get information, and perhaps most important, I get hints. Sometimes a mere hint, thought over and elaborated, will result in working out an idea which means an attractive new line for my show window. I believe in being up to date in my display and keeping it always as novel as possible.

I have now got a good studio, have considerably raised my prices—cabinets from $3 to $5 per dozen, according to process, etc.—and have money in the bank. I think the one thing which more than any other helped me in my early days was my endeavor to be tactful and courteous at all times.

## ENLARGED NEGATIVES.

BY E. W. ROBERTSON.

THE American photographer does more direct work in large sizes than does the worker in any other country. Still, he is often called on for an enlargement. Many of our smaller men have not facilities of direct large work, or an order for an enlargement may come after the negative is taken.

There are still some men who to make an enlargement will make a contact positive from the negative, and from this make the enlarged negative. The better plan, and one which ought to be universal, is to make the *positive* by enlargement, and the enlarged negative from this by contact. This method has but one disadvantage, the extra expense of two large plates instead of one—but this is not necessary, as will be shown.

The advantage—except in this matter of cost—is always on the side of the enlarged positive, and especially is this the case in

the matter of retouching. There is nothing worse than a greatly enlarged retouching stipple (and we see it from the studios of photographers who ought to know better). Where an order for an enlargement is placed at the time of sitting, the enlargement should certainly be made before any retouching is done. The necessary retouching may be done on the transparency, or on the negative from it, or both, and of course of the size in which it will show in the print. This besides giving a double latitude practically overcomes an offensive grain. In the case of an enlargement from a negative already retouched this extra latitude to soften coarseness will be equally valuable. It is not, however, absolutely necessary to go to the expense of two large plates. Not only a paper negative, but a paper transparency as well may be made. An enlarged paper negative is almost always feasible, and where the enlargement is of large size—say thirty inches or more—the transparency may also be paper. In smaller sizes the double use of paper may give too pronounced a grain, though it is perfectly in keeping in the larger picture. This plan is especially suitable in the hands of a man who has got beyond the finishing stages of retouching and can improve a bromide with a brush.

Use a slow bromide paper and expose very fully to obtain all the detail in the high-lights. Develop with a view to harshness—we want what would be a very bad print were it the final one. This positive may be worked up—it may look overworked—with a brush, remembering that it is to be copied from by transmitted, not reflected, light. We may, therefore, rather block the shadows as it lays before us, or better we might retouch it by transmitted light, holding it before the window.

A printing frame is not necessary to make the negative. If one is not available the two papers may be laid in contact on a perfectly flat board, with a sheet of plate-glass over them. Roughly speaking, printing through paper will take five or six times as long as through glass. Development of the negative should be as for the positive and much too black as seen by reflected light. This negative obtained, printing may be by any method—Aristo, platinotype, bromide, etc. Those who are used to waxing paper may increase the printing speed of the negative considerably, but waxing a large sheet is by no means easy work. However, we do not, unfortunately, usually receive orders for enlargements in dozen lots, and so speed in printing is not vital. And with enlargements through the thick paper used for bromides there is no objection to printing in direct sunlight.

## A SPECIAL LINE.

It is interesting to note how very frequently we are asked for advice on the question of fixing a price and doing a class of work on the Hollinger basis. It is satisfactory to see so many people on the lookout for a new move, and especially to note the calm business-like way in which they discuss pros and cons. Obviously any such move is very largely dependent on the location of the photographer. It has been suggested that one print might be made from a negative and the negative immediately destroyed, but such a fantastic suggestion can only be made by a person with an utter disregard of practicability. The suggestion we would make is more on the line of running a small series of pictures—say four or six, from as many different negatives.

At first sight this looks rather like an expensive proposition but in reality it is not so. What proportion of the plates exposed ever reach the dignity of a finished print? The average thing is, we fear, to make at least half a dozen exposures when we have a sitting which will resolve itself into a probable order for a dozen prints. Of these six plates, all of which are carefully developed, the two likeliest are chosen, retouched and proofs submitted. Finally but one of these six negatives is selected by the sitter and a dozen prints are made.

Suppose we take a trade in which cabinet prints are delivered at $3 per dozen.

This will cover the larger part of fairly good class work done in our smaller cities. Many men unfortunately do work worth $3 but cannot get the price. Although in such a business the cost of plates is a serious item, very few indeed of our workers limit themselves to two or even three exposures. Suppose that the special line were of six separate poses for $5. There would be of course extra retouching, and there should be a little special care in the printing. At $4 it would possibly pay, but it is scarcely worth while to introduce a novelty unless it brings in something more than the mere added cost of material or of labor. The easiest style would probably be head and shoulders—not too large—or down to half or three-quarter length.

Full length will perhaps be a little difficult to represent in sufficient variety, and very large heads will open the problem of extra retouching. We are here supposing the case of where the poses may be mounted for framing in one frame, in which case a certain unity will be advisable. Where they are mounted separately they may of course be taken in more considerable variety. Head and shoulders were suggested because in such an arrangement a very slight alteration of the pose will be sufficient to give appreciable variety in the print.

The different poses could be photographed without too much expenditure of time, especially if a revolving posing chair were used.

There should be something distinctive about the prints—something which will separate them as widely as possible from the ordinary $3 dozen. One style might be to present the half-dozen in a single cut-out mount. This style would not be widely popular, but it should certainly be one of those shown. Another style is the one in use so largely by photographers of children—that of printing several poses on one piece of paper. Special frames for this purpose are made by Hyatt and by Mellen, and the latter tells how good blending is secured in his little book *Panoramic Photography*. Or the pictures may be grouped on one large sized piece of paper, requiring careful work, for which an extra price should be charged.

More usually the pictures should be printed and mounted separately. As the usual line is sent out mounted on cabinet sized mounts these should be gotten out in some distinctive fashion. Let the prints themselves be different. One may be a vignette, one trimmed oval, one a narrow upright; or in any or every way that suggests itself as best for the print under question. The mounts too may be various, say one a rembrandt, others gray or green or carbon-black as preferred. And the whole six when carefully mounted should be enclosed in one portfolio.

One fashion which has been successful in some hands is worth special mention—that of printing on a large sized sheet of paper and then "plate-sinking" the centre. Select the paper—Aristo, bromide, Velox, platinum or any other—of the full size of the mount usually used. Print in the centre, using either a vignette or a mark. When the print is finished and quite dry, it is laid face upward on three or four thicknesses of blotting paper and over it is laid a die the size and shape of the required sink. The whole is then carefully placed in a copy press and tightly screwed down. The foundation of blotting paper allows the print to give a little under the die (which may have been cut with a sharp knife from hard cardboard) and so show a plate mark.

A certain implied added value will be given to these prints if they are personally signed. For light tinted mounts a moderately soft lead-pencil will be better than ink. Ink may be used on the dark mounts, but a good effect on many mounts is to write the name with a very fine brush and rather thick red paint.

---

VERY large prints which will not go into the washing tank may be laid down on a sheet of clean glass and squeegeed to get as much water as possible out of it. Soak it for five minutes in a dish of water and again squeegee. Do this five or six times and the print will be free from hypo. Or if a jet of water is available a fine spray may be thrown on to each side of the print as it lays on a sheet of glass. If the spray is kept moving over the surface five minutes each side will suffice.

## THE AUTOPOZE.

THIS is the day of the "auto." Some photographers possess automobiles, but they are few. In photography the "auto" is usually the automatic printing machine or the automatic developer. Between these two, and perhaps more practical than either, comes the "autopoze." It is less expensive than the automobile, but offers quite as much fun, and works as well in-doors as out-of-doors.

The autopoze, briefly described, is a little contrivance which added to the hand camera (or on any camera having a pneumatic shutter, time or instantaneous), automatically opens and closes the exposure shutter, and thus enables the photographer to include himself in his pictures. As the "autopoze," Booklet puts it: "With an autopoze you can be your own life in the landscape, your own fisherman by the quiet stream, your cyclist on the country road, farmer, mechanic, and a thousand other things. If you have trouble in getting models to pose to suit your ideas in a character sketch, get an autopoze and do it yourself." What more could mortal desire? The autopoze is made by the Faries Mfg. Co., Decatur, Illinois, and costs $2.50. One lasts a lifetime. Its almost infinite possibilities are self-evident.

Unless we are mistaken the autopoze is the invention of Mr. R. Faries, and what it will do in capable hands is well described and illustrated in the little booklet issued by the Faries Mfg. Co., referred to above. Judging by its performance in our own rough tests the autopoze is a distinct addition to the photographer's kit. It is, of course, chiefly intended for amateur photographers, but the wide-awake professional will see in it a studio help worth its weight in gold. How? Why, attach it to your studio camera and, after you have made your regular sitting, give the sitter a chance to make an exposure to suit himself or herself. We are presuming, of course, that the novelty has been well advertised by the photographer, and the opportunity explained to the customer before the regular sitting begins. That the invention would draw customers there can be no doubt; that the explanation of its use to the customer would form a capital introduction to the regular sitting is equally plain. A print from the autopoze exposure would form a happy souvenir of the sitting, and serve to emphasize the fact that the professional portrait (made in the usual way) is worth what it costs. This is not saying that the autopoze portrait falls short in desirable qualities. It is different, that is all. Autopoze portraits in the booklet are good examples of at-home work.

How does the autopoze work? It is connected with the pneumatic shutter with a piece of rubber tubing and, when set, "presses the button" after an adjustable length of time, giving any desired length of exposure before closing the shutter, or it may be used as a substitute for the bulb in hand exposures, requiring less exertion than the bulb method, and thereby obviating the danger of movement. We cordially commend it to our readers, professionals and amateurs.

## THE WISCONSIN CONVENTION.

MILWAUKEE, MARCH 12, 13 AND 14, 1901.

THE Fifth Annual Convention of the Wisconsin Association opened with a demonstration of posing and lighting at the old Klein & Guttenstein studio (which had been rented for this purpose) under the management of the Hammer Dry Plate Company. At 3.30 P.M. the convention was called to order by President Ralph, who followed with a short business-like address. After the address of the President the minutes of 1899 and 1900 were read and approved.

Communications were read from Charles E. Smith, of Evanston, Ill.; H. Lancaster, Omaha, Neb., President of the Nebraska Association; Mrs. Fitz Guerin, St. Louis,

Mo., and from our Treasurer, F.W. Curtiss, who presented his report and regretted his inability to be with us owing to great pressure of business.

R. J. Miller moved that an extra arc lamp be put in to light up the darkest corner of the room. Motion lost.

The following nominating committee was appointed:

H. C. Watton, A. A. Bish, and W. H. Hillman; after which the meeting was adjourned until 10 A.M. Wednesday.

*Wednesday, March 13.*

Called to order at 10 A.M.

Communications read from the Mayor of Milwaukee and the Business Men's League of Milwaukee, requesting that we continue to hold our Annual Meeting in Milwaukee.

The nominating committee reported as follows:

*President*, H. S. Miller, Fond du Lac.

*First Vice-President*, B. C. Guttenstein, Milwaukee.

*Second Vice-President*, A. E. Taylor, Delevan.

*Secretary*, J. M. Bandtel, Milwaukee.

*Treasurer*, W. A. Pryor, La Crosse.

There being no candidates placed in opposition to the above ticket, the Secretary was instructed to cast a ballot for the election of each of the nominees separately, which was done and the above named gentlemen were declared elected.

The judges on awards then handed in their report as follows:

*Grand Portrait Class.* Three pictures, any size, open to active members only. No entries in this class.

*Genre Class.* One picture, any size. First Prize, A. S. Ralph, Oshkosh; Second Prize, A. A. Bish, Chippewa Falls; Third Prize, F. S. Shindler, Monroe.

*Miniature Class.* Twelve pictures. There being only two entries in this competition the First Prize was not awarded; Second Prize, H. C. Wetton, Lancaster; Third Prize, A. A. Bish, Chippewa Falls.

*Portrait Class A.* Three pictures, 8 inches or larger. First Prize, Rice & Fromm, Milwaukee; Second Prize, J. M. Bandtel, Milwaukee; Third Prize, John Stolt, Calumet, Mich.

*Portrait Class B.* Twelve cabinets. First Prize, Rice & Fromm, Milwaukee; Second Prize, A. A. Bish, Chippewa Falls; Third Prize, tie, W. A. Pryor, La Crosse, W. C. Larsen, Randolph.

*Landscape Class.* Not less than six nor more than twelve pictures, 5 inches or larger. First Prize, J. H. Field, Berlin; Second Prize, J. M. Bandtel, Milwaukee; Third Prize, A. A. Bish, Chippewa Falls.

*Interior Class.* Not less than six or more than twelve pictures, 8 inches or larger. There was only one entry in this class and the competition was declared void.

*Commercial Class.* Not less than six nor more than twelve pictures, 8 inches or larger. First Prize, Geo. W. Wise, Janesville; Second Prize, Voigt Co., Milwaukee; Third Prize, J. M. Bandtel, Milwaukee.

*Special Class.* Open to photographers outside of Wisconsin and upper Michigan, three portraits, any size. First Prize, E. E. Dexter, McKeesport, Pa.; Second Prize, Wm. Godfrey, Hyde Park, Chicago; Third Prize, Henry Moore, Kirksville, Mo.

The picture which was selected to represent Wisconsin in the Inter-State Exhibit was chosen from a complimentary exhibit made by Vice-President J. F. Denninger, Neenah.

Signed by Judges

J. A. GUNDERSON, Winena, Minn.
J. R. SNOW, Mankato, Minn.

A motion was made and carried that Messrs. Pryor, of La Crosse, and Larson, of Randolph, who were tied for third prize in Portrait Class B, each be awarded a ribbon as winner of the third prize.

Moved by Klein that the Secretary be instructed to notify Dan Johnson, of Oshkosh, that his exhibit which would have won second prize in its class, according to the markings of the Judges, was disqualified owing to a non-compliance with the rules and regulations governing the competition; and to notify Louis Schreiber, of West Bend, that his exhibit (while showing a very high order of merit) was disqualified owing to the same unfortunate non-compliance with the rules.

Adjourned until 4 P.M.

*Wednesday*, 4 P.M.

The afternoon's proceedings commenced with a demonstration at the studio in the hands of the Seed Dry Plate Company, which was followed at the Convention Hall by a fine paper talk and demonstration by Harry Fell, assisted by Harry Smith.

Meeting called to order at 4 P.M. Calling Vice-President Denninger to the chair, President Ralph discussed doing away with the two extra members of the Executive Committee, pointing out that their services were not needed on the board, and that they were an unnecessary expense at the usual board meetings.

Moved and carried that this matter be voted on at the next regular meeting.

Prof. J. H. Vanderpoel was now called upon to address the meeting and taking for his text "The Artistic in Photography" he made an exceedingly interesting talk on the possibilities of photography when artistically executed, and kept his audience interested until long after the usual time of adjournment.

*Thursday, March 14*, 10 A.M.

The President, after calling to order, started a very lively discussion (in which many members took part) as to the advisability of eliminating the medal feature from our competitions, making the contest purely an educational one. A motion was finally put and carried that it be left to the discretion of the Executive Committee, as they may be able to get some ideas from the National Convention, who are to exhibit exclusively on the educational plan this year.

Moved and carried, enthusiastically, that we hold our next Convention in Milwaukee, and as near this time in the year as practicable.

Moved by Klein, that we amend Article III., Section 2 of the Constitution, by striking out the words "and two members to be appointed by the President." Motion was carried.

The Chair appointed the following Committees:

*Auditing Committee*, W. A. Pryor and J. M. Bandtel.

*Committee on Resolutions*, Ditmar, Fugate and Pryor.

Mr. F. Dundas Todd, of Chicago, being called upon, gave us a stirring speech, rousing us all up in his usual kindly and good-natured yet very vigorous way. We are not quite prepared to believe that his only interest in photographers is from the dollars and cents point of view.

Prof. Vanderpoel (who had been criticising individual exhibits for the members all the morning) now took the floor for a general criticism of the exhibits in the Instructive Class, which were of course specially sent to be criticised. The Professor invited his hearers to ask questions, which they did quite freely, and they kept him busy answering questions until the meeting was adjourned until 3 P.M.

*Thursday*, 3 P.M.

Cramer's people took charge of the work at the studio under the special direction of Mr. Sid. Wells, who came from New York for the purpose, and the crowds, which were larger each day, showed how very attractive this feature of our Convention work has been.

At the hall the meeting was called to order at 3 P.M. and the Committee on Resolutions reported as follows:

"Resolved, that the Photographers' Association of Wisconsin, now in open convention for the first time since the death of the lamented Geo. C. Thomas, of Racine, hereby express their most heartfelt regrets at his loss, realizing that he was one of the foremost members of our Association; one who always had the true spirit of an artist, and was always willing in a modest way to educate those with whom he came in contact:

"Resolved, that this expression of our feeling be spread upon the minutes, and a copy of the same be forwarded to his widow.

"Respectfully submitted,

"C. F. DITTMAR,
"W. A. PRYOR,
"E. C. FUGATE."

We the Photographers' Association of Wisconsin, at a meeting held in Milwaukee, March 12, 13 and 14, 1901, do hereby express our most sincere thanks for the generous support extended to us by the Merchants' and Manufacturers' Association

of Milwaukee, the Business Mens' League, the city press and photographic journals, the manufacturers and their representatives, for the kind hospitality and entertainment furnished by the local stock dealers, and last but not least to the judges and officials whose terms of office have just expired, all of which has tended to make our 1901 meeting a grand success.

Respectfully submitted,

C. F. DITTMAR,
W. A. PRYOR,
E. C. FUGATE.

The Auditing Committee reported that they found the Secretary's accounts correct.

Moved and carried that the committes reports be accepted.

Mr. Smith, of the Eastman Company, then took the floor and spoke very earnestly on the need of greater neatness and tidiness in the average studio, and of the very bad impression made on the better class of patrons when they enter an untidy place.

Mr. Smith was followed by Fell, Whippel, Edgworth and Ralph, and in fact a very agreeable feature of this last session of the Convention was the large crowd present and the interest which was sustained right up to the last minute.

Final adjournment at 4.30 P.M.

W. T. ROSS, *Secretary*.

## SODIUM SULPHITE.

BY JEX BARDWELL.

I take the following as my starting-point: Water, 4 ounces; dissolve in it soda sulphite (crys.), 1 ounce; then add pyro, 120 grains; making the solution up to 5 ounces. In all photographic formulæ use water that has been *boiled*.

Obtain say six samples of sulphite, each one by a different manufacturer, and make up six solutions as above, using a different sample of sulphite in each; cork up tight and set them aside. In time you will observe that some one of them will discolor sooner than the others, and that one of them will remain clear when the others have discolored. This would indicate more or less carbonate of soda in each sample. I have seen it stated that a good sample of sulphite might contain 6 per cent. This would be nearly 30 grains of carbonate to each ounce of sulphite. In using dry pyro this would not be noticed, but in using amidol the result would be very noticeable. Most plate manufacturers recommend some addition to the sulphite, presuming that it will usually be alkaline. To test, you drop a piece of red litmus paper into the solution; if alkaline it will turn blue. You are then advised to drop some acid into it till the paper resumes its original red color. Sulphuric, sulphurous, nitric, citric, acetic, oxalic, and formic acids have all been recommended for this purpose.

Presuming that the samples of sulphite contain a certain quantity of carbonate of soda, the addition of sulphuric *acid* converts it into sulphate of soda; sulphurous acid, into sulphite; nitric acid, into nitrate of soda; citric acid, into citrate of soda; acetic acid, into acetate of soda; oxalic acid, into oxalate of soda; formic acid, into formate of soda.

Sulphate and acetate of soda retard development according to the quantity present; nitrate and oxalate of soda are neutral as far as I have observed. Formate of soda added to a developer accelerates and is a valuable addition in bringing up detail that might otherwise be lost.

Whichever is used, add *no more* than is just necessary to neutralize the solution, with the exception of formic acid. A few extra drops of this is sometimes beneficial.

With sulphuric acid, the more added the more sulphate; it decomposes carbonate and *sulphite* of soda into *sulphate*.

In my practice I use sulphite in saturated solution. I find it keeps well as I prepare it. I take a bottle that will hold two pounds of crystals, pour water on the crystals up to the cork; it quickly becomes saturated. When I pour out of the bottle

I at once fill up to the cork again, give it a shake and it is soon right again. All you have to do is to keep the bottle filled with crystals and water and it will keep good all the time. I also drop into it about 40 drops of acetic acid to the two pounds of sulphite, and in the same proportion when I add further crystals. Four ounces of this saturated solution represents one ounce of sulphite. Sulphite is most soluble in water at 90° F. Boiling water or water at 212° F. decomposes the sulphite.

A young photographer will come in and ask me to develop two plates for him, so that he may see how it is done. I take two ounces of water, add to it two drams (fluid) of the saturated solution of sulphite, a mustardspoonful of dry pyro, and one dram of acetone. It is done as quick as I write this (and in my opinion no better developer can be desired). So much for the convenience of using sulphite in a saturated solution. In compounding photographic formulæ the 480-grain ounce is used, and in using the saturated solution in mixing developer the following may be useful:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | fluid | drams | represent | 15 | grains | of | crystals. |
| 4 | " | " | " | 30 | " | " | " |
| 1 | " | ounce | " | 60 | " | " | " |
| 2 | " | " | " | 120 | " | " | " |
| 4 | " | " | " | 480 | " | " | " |

These little hints are for the young folks, we old hands of course know all about it.

## NEWS AND NOTES.

*Bottles.* In pouring from a bottle always hold it near the bottom. It then balances well in the hand and the flow can be more accurately controlled. If the bottle is too large to grasp in one hand rest it on the table, and taking it by the neck tilt it over the tray or graduate.

Stoppers are unlike corks—they have no give in them. Therefore in washing bottles, especially those of about one size and pattern, be careful that each stopper is kept with its own bottle.

Alkalies should never be kept in a stoppered bottle. They have sufficient action on the glass to sometimes weld stopper and neck together, and if this happens the bottle must be broken. Sometimes a stopper is merely wedged, and it becomes a difficult proposition, because strength must not be applied to its loosening. In such case take hold of the stopper—not of the bottle—with one hand, and strike it with a piece of hard wood (metal would probably cause it to snap). Do not hit the stopper on the flat side. If this will not move the stopper try heating the bottle-neck, very gingerly, over a small gas-jet. A bottle should be filled by means of a funnel. Place a bit of string or a wad of paper between the funnel and the neck of the bottle to allow the air to escape as the liquid is poured in. Never fill a bottle too full; liquid cannot be compressed, and it is quite possible to burst a bottle by inserting a very well-fitting stopper after filling the bottle to the top of the neck.

If you have a tap in the dark-room, always protect its end with a length of rubber tubing. It saves a possibility of spoiling a film against the sharp metal of the tap, and if the tube is a foot long the stream of water may be sent in any direction.

*An antihalation backing* is made of two grains of aurine in one ounce of plain collodion. Flow it over the back of the plate and drain the surplus back into the bottle. The backing will not interfere with development, and can be removed by lightly rubbing with a damp cloth.

*A brilliant black varnish* may be made by dissolving a little black sealing-wax in enough wood-alcohol to just cover it. The varnish should be quite thick and thin with more wood-alcohol as required. The varnish will dry quickly and is both black and brilliant though rather brittle.

*A good retouching medium* is made by beating the white of one egg to a froth; let it settle and add ten ounces of distilled water and four drops of ammonia. Flow over negative before drying.

# EDITOR'S TABLE.

NOTICE TO READERS, SUBSCRIBERS, AND ADVERTISERS: The continued growth of the business of the MAGAZINE compels us to seek larger and more commodious offices. On and after May 1st, therefore, the editorial and publishing offices of the MAGAZINE will be found on the fourth floor, at 287 Fourth Avenue, New York (next door to our former location), at the corner of Fourth Avenue and Twenty-second Street.

OBITUARY.—DEAR MR. WILSON: Another veteran of the camera has gone. CHARLES H. FONTAYNE, aged eighty-seven years, died at Clifton, N. J., on March 18th. Fifty years ago the establishment of FONTAYNE & PORTER, of Cincinnati, O., was prominent as one of the famous ones of America. In 1856 Mr. FONTAYNE joined me in business in Cleveland, and gave me my first instructions in negative making and enlargements for oil portraits. He was a scholarly man and well posted in science, in chemistry, and in optics—a really advanced man in his profession. After a few years he went to New York, where larger opportunities than I could offer were open to him. As an inventor and manufacturer he was well known to many of the older photographers. Yours truly,

J. F. RYDER.

CLEVELAND, OHIO, April 5, 1901.

---

THE LOVELL DRY PLATE MANUFACTURING CO., New Rochelle, N. Y., has published two interesting booklets on its *Backed* and *Color Differentiating Plates*, which our readers should get and read.

---

MR. A. G. MARSHALL, of 625 Vanderbilt Avenue, Brooklyn, N. Y., is meeting with much success in his instruction in art by mail. Mr. MARSHALL has instructed such accomplished persons as Prof. BROOKS, the famous astronomer of Geneva; Miss L. M. POWE, Professor of Art, Wells College; Miss E. W. BENNETT, Professor of Art, Keystone Normal School: Mrs. EDITH C. HAGERTY, Kansas Wesleyan University; WILLIAM FOXALL, photographer, Brandon, Manitoba, as well as many amateurs.

Miss POWE writes as follows: "As an instructor I have found Mr. ALBERT GUVERA MARSHALL able, broad, progressive, sympathetic, thoroughly conversant with technical methods and latest methods of teaching, and an admirable critic."

---

MR. F. M. SOMERS, of Cincinnati, Ohio, favors us with a magnificent print of his portrait of FRANCIS WILSON, the comedian (see the portrait in *Mosaics*, 1901). The portrait is a work of which Mr. SOMERS, skilled worker though he is, may justly be proud, and we congratulate him upon his success with his subject.

---

MR. FITZ GUERIN, of the Guerin College of Photography, St. Louis, writes that on the 1st of June the College will have accommodations for fifty more students, the enlargement of the building being made necessary by the large class of professional and amateur photographers desiring to take a course of practical photography under Mr. GUERIN'S instructions.

AMONG recent arrivals on our table are two fine portraits from the veteran GEORGE G. ROCKWOOD. These give us two excellent "likenesses" of CHARLES DUDLEY WARNER, the famous writer and editor, and do high honor to Mr. ROCKWOOD as photographer. Mr. ROCKWOOD recently celebrated his forty-fifth year behind the camera, and marked the event in a characteristic way by inviting his employés and a few friends to an evening's entertainment at his home. The affair was numerously attended and proved most enjoyable.

---

H. A. HYATT, the enterprising manufacturer and dealer, of St. Louis, is publishing a capital little photographic monthly, called *The Photo Mirror*, full of valuable reflections and well illustrated. It is edited by Mr. HARRY H. HYATT, and shows much care in its make-up.

---

*To the Editor of* WILSON'S MAGAZINE.

DEAR SIR: In an article on "Photographic Copyright" in your March issue the author seems to see some difficulty in deciding what is equity in a case quoted, JACKSON *vs.* THAYER. It appears to me that in the English ruling good law and equity are one, and so I quote it for your readers: "The taking of a natural scene by JACKSON should entitle him to the copyright of *that negative* and its productions, the latter of any size or any style. The scene itself he cannot copyright. THAYER, or anyone else, may go and take the same or a similar scene, and it is his so far as his negative is concerned. But if he steal the use of JACKSON'S negative or any print of it he should be held liable." Yours respectfully,

WEST-END-PHOTOGRAPHER.

LONDON, W.

---

THE Actien-Gesellschaft für Anilin-Fabrikation of Berlin, Germany, informs us that the little pamphlet on their world-famed preparations for photography, of which pamphlet they circulated 80,000 copies in the United States some time ago, has met with so much approbation on the part of professional and amateurs that there will shortly be necessity for publishing a new edition of it.

The useful little booklet, which is distributed free of charge through all dealers and importers in photo-supplies, is indeed worthy ot be recommmended to all interested in photography, containing, as it does, full information about the properties of the well-known developers Rodinal, Imogen, Amidol, Eikonogen, Diogen; also about the Agfa-intensifier and Agfa-reducer, further detailed instructions for use, formulæ, prices, etc.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of:

# IMOGEN, Patent Developer

**IMOGEN** is **well suited** for the **modern highly sensitive plates.**

**IMOGEN** works **clearly** and **brilliantly.**

**IMOGEN** produces all the **gradation, from density to fine detail,** the resulting negatives being therefore of **the highest grade.**

**IMOGEN** is not much **affected by ordinary variations** in **temperature.**

**IMOGEN** does **not injure** the **fingers.**

**IMOGEN** answers very well for **"stand-development,"**

for development of lantern slides,
" " of diapositives on gelatino-bromide plates,
" " of bromide papers, etc.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $ 0.37 | 1.20 | 2.10 | 3.95 |

# Agfa-Intensifier.

**Patented.** * **Name Protected.**

**A One Solution Intensifier. Only to be diluted with ten parts of water. Keeps indefinitely. Complete Intensification in one manipulation takes about ten minutes.**

| 4 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $ —,60 | 1,— | 1,75 |

# Agfa-Reducer.

**Name Protected.** * **Patent applied for.**

**A permanent dry powder. Unequalled in simplicity. Only to be dissolved in 10 parts of water. Complete reduction takes about five minutes.**

$ —,80 per original bottle of 4 oz., with **screw-lid and hollow glass-stopper, serving as measure.**

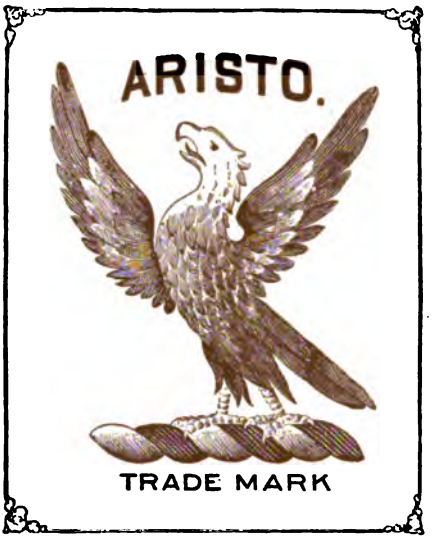
$ 1,—per box of ten glass-tubes containing ten grammes each.

Eikonogen. Amidol.

Rodinal. Diogen.

Sold by all dealers.

1889




1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

**Manufacturers of**

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 534.
JUNE, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

THE NATIONAL CONVENTION AT DETROIT . . . . . 193
DARK BACKGROUNDS AND SIMPLICITY . . . . . 195
ON LIKENESS TAKING. By Frank M. Sutcliffe . . . . . 196
A NEW LIGHT FOR PORTRAITURE . . . . . 197
APPEARANCES IN THE STUDIO . . . . . 198
LIGHT AND SHADE IN PHOTOGRAPHY. By Harriet Sartain . . . . . 200
PICTORIAL PHOTOGRAPHY. By Alfred H. Wall . . . . . 204
NEWS FROM THE CRAFT . . . . . 207
ADVERTISING WITHOUT PRINTERS' INK . . . . . 209
DEPTH: AN ELEMENTARY CHAPTER ON OPTICS . . . . . 210
PANORAMIC PHOTOGRAPHS. By Turner Yalding . . . . . 213
NEWS AND NOTES . . . . . 216
THE PENNSYLVANIA CONVENTION . . . . . 217
"HOW TO ENJOY PICTURES" . . . . . 225
THE VALUE OF FRATERNITY. By William Edward Ward . . . . . 226
THE CAPITAL CAMERA CLUB EXHIBITION, WASHINGTON, D. C. . . . . 229
EDITOR'S TABLE . . . . . 231

OUR PICTURES:

Frontispiece, "The Cello Player." From a Platinotype by Charles P. Marshall, Cazenovia, N. Y. Engraved Supplements from Photographs by Schloss, New York; Louis Walker, Philadelphia; F. M. Somers and W. N. Brenner, Cincinnati; A. N. Camp, Jamestown, N. Y.; W. W. Cowles, Seneca Falls, N. Y.; J. H. Field, Berlin, Wis.; and Schreiber & Sons, Philadelphia.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N.Y. POST OFFICE AS SECOND CLASS MATTER.

HARVARD COLLEGE
OCT 27 1936
LIBRARY
Fine money

The monthly edition of *WILSON'S PHOTOGRAPHIC MAGAZINE* has been *increased three times* since the year began. January, February, March and April numbers are out of print. These facts speak for themselves. Professional photographers realize that WILSON'S MAGAZINE is a trade journal that helps; that gives useful and timely information concerning things of interest to the craft; practical articles, formulae and methods; and instructive illustrations showing what American photographers are doing.

WILSON'S MAGAZINE is an independent journal for the practical worker; has no stock house or "influence" behind it, no "axe to grind." It gives all the news and is helpful, as well as interesting from cover to cover. Every photographer should see it every month. Send in your subscription to-day. Three dollars for 12 months. One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON
PUBLISHER
287 Fourth Ave., New York

THE CELLO PLAYER

By C. P. Marshall, Cazenovia, N. Y.

# WILSON'S PHOTOGRAPHIC

[illegible]

[illegible]

## THE NATIONAL CONVENTION.

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. JUNE, 1901. No. 534.

## THE NATIONAL CONVENTION AT DETROIT.

THE prospects for the forthcoming convention are that we will have the greatest crowd that has ever come together at one of our national meetings. There will be a big delegation from New York, and we are trying to make special rates for the trip, which will give a chance to see the Pan-American Exposition on the return.

I would like to say that this is to be a meeting of and for the rank and file. We will have a number of most interesting talks on the most interesting subjects. The exhibition will show the up-to-date notch which has been reached by the photographer of to-day. The man who cannot profit by the Detroit meeting is either a dullard or simply will not grasp good opportunities presented.

There are no pedestals erected at the educational convention, so that there can be none to sit on them. We are all going to meet on the ground floor as fellow-craftsmen, with only the contention, or rather emulation, of who can best work and best agree. There is fun enough in prospect, and there is profit enough to pay for it.

E. B. CORE,
President P. A. of A.

In the past career of the P. A. of A. a convention has always been looked forward to with a certain amount of uncertainty. The foremost thought of the attending photographer was invariably bent toward prizes, medals, trophies, etc., the contention and strife was always strong before the convention, and ofttimes stronger afterward. The only existing interest seemed to centre on the winning of prizes, beyond which little thought or action was devoted to the welfare of the profession. By eliminating awards (like those we received in our boyhood days at Sunday-school for prompt attendance, study, etc.) we hope to reach a higher, nobler, and more advanced state of conditions.

The boy that must be paid for going to school will not inbibe the instruction and learning that his companion who is willing and unawarded does; his award is in the knowledge he gains, and the prize that he acquires is above all barter or purchase.

The Educational Convention of 1901 should appeal to all as an advanced school of photographers, a university of all photography combined, and all who have yet to learn (their name is legion) should with eagerness attend. The educational advantage will far eclipse anything heretofore offered.

Exhibits from photographers who are the head and front of the profession in the country, and who were beyond any competitive display of former days, will now exhibit. We have their promise and now want yours. There will be no medal in return for your efforts and attendance, but your production will hang side by side with the best, and honors shall be equal.

The executive committee are promising much, later we will promise more, and finally will fulfil every promise. Will you come?

H. S. KLEIN,
Second Vice-President P. A. of A.

### LET EVERY PHOTOGRAPHER MAKE AN EXHIBITION AT THE EDUCATIONAL CONVENTION.

The officers of the Association feel that in abolishing the prize system they

have opened the way for a larger and better exhibition of photographs than has been possible in past years. They are meeting with much encouragement and have received promises of exhibits from a number of the leading men who are known the world over for their ability, but who have seldom, if ever, made an exhibition of their work at a convention or competed for a prize. The plan this year is one that ought to develop the individuality of the exhibitor. There being no class rules or size restrictions, and, above all, no fear of getting left if one does not happen to strike the fancy of the judges, will give an opportunity for every exhibitor to do his best in getting up something original.

It is a fact that there is nothing that brings out the best that is in one as the preparation of an exhibit, the planning of which cannot fail to bring out some new thought, and one will be well repaid for the time and labor spent in its preparation.

We have made arrangements for an excellent gallery in which to exhibit the work. All exhibits will be evenly lighted by daylight, and there will be a harmonious arrangement of the exhibits so as to get the best effect.

Of course, each exhibitor will do his best, for, while there are no judges or prizes, there will be criticisms and comparisons by the photographers themselves, and the exhibition this year will certainly be one of the most interesting and instructive and bring out more new ideas than any other photographic exhibition.

There are no restrictions as to size or number, so let every photographer send something, and then come and see how his work looks alongside the other fellow's, and at the same time see what the other fellow is doing.

Do not delay, but commence at once to get up something for the educational convention. Exhibits should be in Detroit by August 1st. D. D. SPELLMAN,

First Vice-President P. A. of A.

RAILROAD AND HOTEL RATES.

The railroads have granted a rate of one and one-third fare on the certificate plan, with return limit good, leaving Detroit, August 14th at midnight. Photographers must secure the usual certificate when buying ticket on leaving home.

Arrangements will be made for a special excursion to Buffalo by boat, leaving Detroit at the close of the Convention, giving the photographers from the West a chance to visit the Pan-American Exposition.

Hotel headquarters will be at the Russell House; rate, $3 to $5, with a special rate of $2.50 for a limited number with two or more in a room. Cadillac Hotel rate, $3 to $5; St. Clair, $2.50 and upward; Griswold and Wayne, $2 and $2.50, and other good hotels rate from $1 per day upward.

Those desiring to engage hotel accommodations can do so by addressing D. D. Spellman, Detroit, Mich., first Vice-President of P. A. of A., and stating what accommodation will be wanted.

DETROIT AND THE CONVENTION.

There is not a more beautiful city or a more desirable place for a convention than Detroit—the Convention City—and the photographers of Detroit will have everything well in hand for the entertainment of the photographers that attend this year.

There will be a boat ride of course. A trip to the Flats, "the Venice of America," will be one of the leading features of the entertainment. A trolley ride through some of the most beautiful residence streets in the city, to be followed by a lunch in one of the parks, and returning to the city by boat, is another feature for an evening's entertainment. Then there will be an afternoon at the Detroit Museum of Art, where we will be the guests of Professor Griffith, who has prepared an exhibition of original photographs of the leading portraits of the world.

This exhibition Mr. Griffith is collecting especially for the entertainment and instruction of the visiting photographers.

The ladies are to be looked after by a special committee, and one of the features in contemplation is a morning trolley ride around the famous Belle Isle Park, a trip every lady will enjoy and never forget.

Aside from what the entertainment committee does, Detroit itself offers amusement and recreation of every description.

D. D. SPELLMAN,

Chairman Local Committee.

## DARK BACKGROUNDS AND SIMPLICITY.

A GLANCE through *Mosaics, 1901*, reveals that dark backgrounds are still the most popular setting of portraiture, but that they are not as universal as they have been. This suggests the inevitable change in fashion by which the dark will for a time be ousted except for occasional use. What will the new fashion be?

The editor of the *British Journal of Photography* some little time ago gave an interesting note on a visit to Scotch photographers. He said that the whole trend of affairs appeared to be toward straight detailful photography, glossy paper and accessories. It is an interesting straw, and shows how, possibly, the stream will flow. There is, fortunately, one thing certain. If photography does ever return to old style work it will be an improved old style, without some of those features of thirty years ago, which are as dead, and as impossible of revival, as the crinoline.

The dark background has done yeoman service for American photography, for it has taught it the value of simplicity. But if we change to light backgrounds we shall find ourselves in a more difficult position. For though success with a dark background is only moderately easy, success with a light one is still less easy. There is little doubt, however, that with light backgrounds the *best* men will achieve greater triumphs than they have with the dark ground, and these triumphs will be most complete in the portrayal of the more delicate gradations of spirituelle feminine beauty. Look through the last volume of WILSON'S. Half the frontispieces have light backgrounds, and only two or three have absolutely dark ones. The management of a light ground, to score a complete success, is difficult. How harsh and prominent the hair is apt to show against a light background, and how dark flesh so often looks against anything very light. But in capable hands a more subtle and delicate modelling can be obtained against a white ground than against a dark one.

The question hinges on relative tone and on tone value. Tone is not color or even tint. It is the amount of light received by any part of an object and is judged in its relation to the light received by other parts of the same object. A picture may be flooded with light from behind the camera, all visible parts being equally illuminated, and if so all the picture will be in one tone. There may be white lace against dark velvet, and one photographs light and the other dark, giving, it may be, a very beautiful and altogether pleasing picture. But that is due to differences of color, not of tone. With dark backgrounds we do not get better relative tones than we do with light; but it is easier to get acceptable results.

We often hear the question asked, "What is there in it?" when a photograph is shown and eulogized. But the answer is, "What is there left out?" The beauty of a picture often consists in the absence of the disturbing objects. Introducing what should be pleasant and attractive ones is dangerous. The art of omitting is everything.

With the dark background we have developed this art; and the omission has gone further than accessory. A brilliantly lighted figure against black stands out boldly, and at first may please; but soon the effect is tiring. We have, therefore, striven to keep our figures somewhat subdued, and have tried for success in the delicate harmonizing of flesh and dress and background.

There may be times when even a checker pattern may pass as a background—but only in genuine at-home portraiture. If a man is photographed in his study or a lady in her boudoir the real wall paper and everyday objects may improve the photograph for all those who know the sitter amid such surroundings; but to place the sitter with some pronounced studio surrounding which has no connection with his everyday life is invariably a mistake.

It is a mistaken notion that the customer demands some special thing. It is the photographer who takes up glossy or matt or some other style and says it is the latest novelty—and forces it on the customer. People will take good work as quickly as that of indifferent quality. If it is not easy to see a valid reason for using an accessory, let the accessory be omitted. It may be that there is one way of introducing

it to advantage; there will be several ways of introducing it to disadvantage; and therefore safety lies in omission. The fashion of dark backgrounds has tended to teach us breadth, and therefore it is a good fashion; it has, too, helped toward simplicity, and therein it has steered us clear of many dangers. If we return to light backgrounds and accessories let us feel our way gently, knowing why we make any more before we do make it, and remembering that we are returning into a more difficult field, where a complete triumph may perhaps be a great triumph, but where the dangers are rendered more dangerous and infinitely more numerous.

## ON LIKENESS TAKING.

BY FRANK M. SUTCLIFFE.

GAIT is said to be a birthright and not an accomplishment. If this is so, it shows that photographers often strive after the impossible when they try to pose awkward sitters in graceful attitudes. Further, if they succeed in making an ungainly person appear pleasing, the portrait will not be so satisfactory as if the sitter appeared ungainly and awkward, for the sitter's friends never see him or her in the elegant positions thought indispensable by the average photographer. We laugh when we see the strained attitudes of the people who were taken during the carte mania, between 1860 and 1870—men standing with one leg crossed over the other, and the like; but the photographers of 1930 and 1940 will laugh at us quite as much, unless we try to be more truthful in placing our sitters before we photograph them.

Nowadays no photographer who values his reputation does pose his sitters. He lets them pose themselves, and only when they appear natural does he expose. It is often difficult in the short time at the photographer's disposal to know whether his sitters are natural, or whether they are posing themselves. As a rule, all quiet, unrestrained attitudes are natural; when the sitter throws his arms and legs about all over the furniture, they are unnatural.

The photographer who attempts portrait work should not be content to study the examples of others; if he does so he will very likely become too much of a plagiarist. The best field for study is the world, where people are always moving; the sitter, when not thinking of the camera; the subject at home, or anywhere but in front of the camera. These should be observed, and a mental or written note made of any good accidental composition or combination of subject and background.

When looking through a series of portraits by such a man as Romney, one feels that he never asked his sitters to assume any position but that he observed them closely, and when he noticed a naturally graceful combination of lines, he made either a rapid sketch of the same or fixed it in his mind. It is, perhaps, too much to ask photographers to spend much time studying their sitters before they photograph them, for this would swallow the whole of the profits; but amateurs with much time on their hands might make many a worse resolve than one deciding not to photograph any friends or relatives till they have studied them for at least a month.

Perhaps the result of this course of study will be many a caricature or grotesque portrait; but these will be better than the usual everyday thing. The monotony in the work made by professional photographers is not owing to the want of invention on the part of the worker, but is owing to the wish of the sitter to look like, or a little better, than everyone else. Every little peculiarity must be noticed by the photographer and smoothed out in the portrait. If the sitter has a habit of poking his chin forward, the portrait must not show it; if he is in the habit of sitting or standing with one shoulder higher than the other, the camera must suspect nothing of the kind.

It is said that the success of many of the most prominent portrait painters of to-day is owing to the large amount of caricature they put into their portraits. The sitters may not be pleased at this; but the sitters' friends are pleased all the more—not that

they are glad to see the little oddities of their friends drawn out, but because they consider the likeness a more speaking one, because they have not been left out, as they would have been in a mere photograph.

It has been said lately that the next generation will have to spend many years in undoing the bad work of the past sixty years before any progress can be made in the arts. If this is so, the student will have to be very careful about the pictures he looks at in the hope of getting inspiration from in the art of portraiture; but once he succeeds in persuading his subjects that there are more desirable portraits in the world than those which are found in *Books of Beauty* and *Galleries of Engravings*, for many people in the provinces have no higher standard than the pictures in such Victorian books, he will have done much to deserve the thanks of his fellow-workers.—*Amateur Photographer.*

## A NEW LIGHT FOR PORTRAITURE.

THERE has just been placed upon the English market an incandescent gas installation which promises a useful, self-contained, and portable light suitable for studio use, and which can be set up anywhere without connection to the gas or electric mains. This light is produced by the combustion, under pressure, of hydrocarbon oil in a Welsbach burner, a method of combustion which, in the case of coal gas, has been largely used in Europe and has proved itself at once effective and economical. The manufacturers of the new gas get the combustible product by saturating air with the hydrocarbon. The mantles used are the usual Welsbach mantles, and they give a candle-power of 125 each. A set of four of these burners arranged around a sitter enables a fully-exposed picture to be obtained in ten seconds on rapid plates with Dallmeyer B B lens. With a larger installaton, of course, a much shorter exposure could be given.

At a recent lecture on the new gas given before one of the English societies, the manager of the Atmospheric Gas Company (3 St. Paul Street, Leeds) said:

"Atmospheric gas is applicable to light, heat, and power, but I intend this evening to confine my remarks mainly to the lighting properties of the gas. Before going into figures I should like, with your permission, to show you the light itself and a few results obtained by its use in photography." (Shows light, negatives, and prints.) "The negatives here exhibited were taken on Barnet plates of medium rapidity, with the lens working at *f*/11, and the exposure was three seconds. With an arc light of 200 candle-power, all other conditions being similar, a considerably longer exposure was required. This shows how extremely rich in actinic rays the new light is, and I may say that spectroscopic and actinometric tests are now being made in our own laboratory, the results of which I hope to communicate to the photographic world as soon as completed. Photometric tests already made show that Welsbach C mantle, when rendered incandescent in our gas, produces a candle-power of 125 as against 45 candle-power when heated with ordinary house gas.

"Now, as regards the all-important question of cost, I think I may fairly claim that we can produce a good illumination for a much lower cost than in the case of ordinary coal gas.

"A careful test made as far back as August 2d last, the results of which have been confirmed on several later occasions, gave the following results, viz.: Eleven lights (Welsbach C mantles), burning continuously for six and a quarter hours, consumed 7.3 pints of mixed oils, costing something near 25 cents—*i. e.*, 68 burner hours, each burner giving 125 candle-power, consumed 25 cents' worth of material, equivalent to .0015 of a penny per candle-power hour. As compared to this result, if we take coal gas at 75 cents per thousand cubic feet, and the consumption of each burner at five cubic feet per hour, producing a light of fifty candle-power, we have for each candle-power hour a cost of .0036 of a penny, or two and one-third times the cost of our new light.

"It has been suggested that as our gas

is a complete, self-burning mixture—that is to say, it ignites on issuing from the burner without any further admixture of air to produce a Bunsen flame—there must of necessity be greater danger of lighting back and thus causing an explosion; but this is really not so. The gas is not explosive in the state of and under the pressure at which it is delivered; and even if it were, the rate of flow into the delivery pipe is greater than that of the propagation of flame in a closed tube. To prove that these are not mere idle words, I will demonstrate to you the effect of using my best endeavors to obtain back lighting into the generator." (Here the lecturer showed some experiments.)

"With this demonstration I will close my remarks; but should any one present feel sufficiently interested in the gas to ask any practical questions, I will do my best to supply him with the information he may require. I feel I must take this opportunity to publicly apologize to the numerous photographic experts who have written to us on the subject of the light; but our whole energies have, up to quite recently, been directed to perfecting the light, and even now we are not in a position to undertake the supply of plant.

"In conclusion, I have to thank you for your attention, and to crave your indulgence if my unfamiliarity with practical photography has caused me to neglect any points of interest that may be obvious to anyone more conversant with that art. I have simply shown you a light which we firmly believe to be richer in actinic rays than any other practical, useful, artificial light; and this, it seems to me, is ample evidence of the large field of usefulness in photographic work which lies before us.

"'Atmospheric gas.' We have chosen this name because analysis of our gas shows that only 1.86 by volume of its constituents is combustible hydrocarbon, the remainder being simply the ordinary atmospheric air."

## APPEARANCES IN THE STUDIO.

PHOTOGRAPHIC studios of the older type are, as a rule, anything but apartments with a cheerful and exhilarating appearance, though one would naturally surmise that if they were it would be an advantage, seeing that surroundings have, to an extent, an influence on sitters, and on some more than others. First appearances, with many, often have a marked effect, and, with such, a shabby and slovenly studio does not inspire confidence in their obtaining high-class pictures; though, as a matter of fact, it makes no difference whatever in the character of the work—that depends upon the artist. Yet appearances do go a long way with the general public, and if the sitter has at the time of the sitting misgivings as to the result, it is not conducive to a pleasing expression in the portrait.

Many of our readers may possibly be able to call to mind photographic businesses that have been built up in a very brief period mainly through appearances and display. We knew a case a few years ago in a country town where there were two photographers who did very good work indeed and had been going on undisturbed in their "jog-trot" style for years, and were doing the main trade of the place. Then a third came on the field, built a new studio, had new apparatus, new furniture, and appointments, so that everything looked bright and fresh. In a short time he had established a lucrative business, while that of the others correspondingly declined. Now, this man's work was not a whit better than, if really so good, as that of the old-established men; neither were his prices lower. But evidently the townsfolk thought they got better portraits from the new studio than they could from the older ones, which, it must be confessed, had a somewhat woe-begone, or, at any rate, anything but a cheerful appearance.

Studios generally have a more or less sombre and monotonous appearance by reason of the backgrounds and accessories being in monochrome, and not relieved by color. There is no actual reason why this should be the case, for they might as well be painted in colors—that is, if the photographic value of the colors employed were rightly gauged. This, however, would en-

tail more judgment than the ordinary background painter possesses. A little color in the studio, instead of everything in monochrome, would be, in many instances, a great relief to the eye and enliven the place greatly.

Many photographers fail to realize the dejected and woe-begone appearance their studios present to strangers. The change has crept on unnoticed by the owner. Under these circumstances Burns may not inaptly be quoted, "O wad some fay the giftie gie us, to see oursels as ithers see us." Of course, our remarks must not be taken as applying to some of the modern high-class studios; they refer only to some —and there are many—middle-class and old-school ones, where we know appearances are very much neglected, as indeed they are in the reception and dressing rooms as well as in the studio. The advent of spring light renders the shabbiness all the more pronounced to strangers. We were recently in a studio we have in our mind, the proprietor of which is an excellent photographer, and is old-established, but is doing anything but a flourishing business. He made the remark that the improved light made the place and everything in it look very shabby, and there was no question that it did. But he said things were so bad that he could not spend the necessary money for its renovation this season. The place looked worse than it would otherwise have done by reason of a number of antiquated accessories that were never used, being stowed away in one corner with a fair accumulation of dust upon them. We quote this place because it is typical of others we are aware of.

There is no reason, however, why such places as above alluded to should not be greatly improved by the owners themselves, with or without the help of an assistant, at a very small cost. Photographers at this season are not, as a rule, too fully occupied. Every one can use a "sash-tool" and a paint-brush, and with these and a few pounds of paint and a very little labor a great improvement may be wrought in spare times. Soap and water will also effect much, particularly with blinds and curtains, also with the furniture, especially if it be followed by a little polish. Shabby cameras and stands are always eyesores in a studio, although they are none the worse for that in the results they yield. Yet some observant sitters may have misgivings on the point. These, however, may easily be renovated by anyone at little or no cost. If the woodwork of the camera be carefully cleaned with soap and water, taking care that no dirt is left in the corners and crevices, and afterward one or other of the well-known furniture "creams" or "revivers" be applied according to the directions supplied with them, the apparatus will look almost as good as new, particularly if the bellows, after being freed from all dust and dirt, be given a coat of leather varnish. This may be obtained from any dealer in bookbinders' material. The camera stands may be similarly dealt with, with soap and water in the first instance. Then if the wood be unpolished, as some is, an application of glass-paper, followed by a mixture of boiled oil and turpentine sparingly applied, will greatly improve the appearance. Emery-cloth will do the needful with the metal work. Indeed, with a little trouble the whole of the apparatus may be made to look, at least to a layman, quite like new.

If all the shabby accessories that are not in use be removed entirely, they will no longer disfigure the studio, and thus give the place a brighter look. Backgrounds and composition accessories can easily be improved by touching them up in the damaged parts with color—distemper or flatting, as the case may be.

Our chief object in this article is to call attention to the fact that shabby surroundings are the reverse of inspiring confidence in customers, and often influence business, as many are much influenced by appearances. Also to point out that they may be greatly improved without any large outlay, with a little extra industry on the part of photographers whose limited means will not enable them to call in the aid of skilled workmen or replace the old apparatus with new.—*British Journal of Photography.*

A PRACTICAL paper on the construction and equipment of the modern studio, with illustrations, forms one of the attractive features of *Mosaics, 1901.* Only a few copies left; 50 cents, postpaid, so long as the supply lasts. You should have it.

# LIGHT AND SHADE IN PHOTOGRAPHY.*

BY HARRIET SARTAIN.

It is very difficult for an artist to speak of chiaro-oscuro, or in fact of art at all, and leave out entirely the subject of color. At first thought, color would seem unnecessary in talking to photographers, but I am convinced that this is not so. I have seen photographic copies of paintings which, by their tone and chiaro-oscuro, suggested the rich colors of the original. And as color-feeling can be kept in a copy of a painting, so it will also show in a picture from nature, if the photographer has arranged his subject for an eye to color as well. It is the understanding of the harmony of color, knowing the value of warm colors offset and enhanced by cool, that makes the fine colorist, and the photographer who feels this keenly will interpret this quality in his rendering in dark and light.

Having spoken of line composition yesterday, we have yet before us the pictorial arrangement of light and shade, formerly always called chiaro-oscuro. Arthur Dow has named it notan.

This is entirely under the control of the artist. By his magic he can transform his subject into one of poetic beauty, gain energy of effect, and give to parts an emphasis not to be obtained by line alone. What in a mere drawing was tame, uninteresting, and perhaps tiresome, is by this means imbued with a sense of reality, energy, and relief. [Slide.] We cannot do better for our first illustration than turn again to that superb portrait of Lord Heathfield, and consider it from our new point of view.

As in all good portraits, our attention is first attracted to the head, notwithstanding there is a larger mass of light below. This is partly due to its position on the canvas, but more to its relief against the background. "For that light must appear the brightest which is surrounded by the greatest quantity of shade." This gives it vigor and strength. The outline of the body is not insisted upon until we come to the point of next interest, the hands holding the key of the fortress he had won from Spain for his country.

The light break in the clouds of smoke reveals the outline of the body with great distinctness, and shows the key to be something of importance. That bright light of the sky coming in sharp contact with the intense blackness of the sleeve gives forceful relief and brings into greater prominence the hand, which is itself shapely, defined against the dark sleeve. Alone, it would form a disagreeable spot, but it is happily united, by means of the key, with the mass of light formed by the other hand and the waistcoat. In this masterly arrangement the danger of the hands becoming isolated spots has been triumphantly overcome, and the union and simplicity of the masses adds greatly to its effect of grandeur and dignity.

### SHADOWS.

The influence of shadow is to give breadth and repose; there are fewer outlines visible, and more is left to the imagination. A scene viewed at noonday may be extremely commonplace and appear to be devoid of any artistic possibilities, but the same view under the effect of twilight may be extremely delightful. Shadow not only gives grandeur, but it throws a veil of mystery over a subject and draws deeply on the emotions of the beholder. Edwin Burke, in his "Essay on the Sublime and Beautiful," dwells upon this element. He says: "Even in painting, a judicious obscurity in some things contributes to the effect of the picture, because the images are exactly similar to those in nature; and in nature dark, confused, uncertain images have greater power on the fancy than those which are more clear and determinate."

"The Death of Abel," by Tintoretto, is an illustration of this point. The shadow mass is greatly in excess of the light, and by this simple means we feel the impression of the tragedy of the event.

The effect of light is just as potent, not only in the expression of the opposite

* Read at the Pennsylvania Convention.

sentiments, but as a means of directing the eye. Tintoretto makes use of light in his "Marriage at Cana" to attract the eye to the figure of Christ, who is sitting far in the background. A stream of light falls on a brilliant white table-cloth and a line of beautiful women, and the direction of the light, its perspective, leads the eye involuntarily to the small, sacred figure beyond.

A photographer has the same resource; he can use his light and shade to emphasize or direct attention to some important point. This is not, as you may think, merely a matter of lighting; it is the use of color values. In massing the darks, not only the shadows of the object, but also any dark values, irrespective of lighting, may be used to extend them. A black cloak, any dark, rich color in garment or furniture may be fully lighted, and yet, by its value, make part of the dark of a picture. [Slide.]

In this "Lute Player," by Caravaggio, the dress, chair, table, etc., are all of the same value, and unite the figure with the background. By this means it is enveloped with a mysterious, fascinating charm. Some artists object to a single spot of light, like this, because it suggests an artificial lighting, as from a bull's-eye lantern. It is a very powerful effect, and one which Caravaggio used often with success, but you will notice he has been careful to enlarge and connect the light of the flesh with the white bodice, music, etc. They form a mass, not isolated spots.

### LIGHT MASSES.

Since the light masses in a picture can be seen from a distance, it is most important that they should be agreeable in shape and be well placed on the canvas and in relation to one another. When they are surrounded by large masses of shadow, as in this Caravaggio, or as in Rembrandt's work, it is even more necessary than when the general tone is lighter. A study of Rembrandt will be very helpful; no one has carried the possibility of shadow further than he. By its means he gave majesty and sublimity to the most commonplace forms. [Slide.] When he made use of a single spot of light he did not relieve it with the same startling distinctness all around, as we have just seen in Caravaggio. In this portrait of an old lady, the ruff serves to spread the light of the face, while its tender shadow acts as a transition between the face and the dark dress. The head, although it tells as a light mass, is not evenly relieved against the background.

Leonardo da Vinci, who wrote a treatise on art in the fifteenth century, recommended that the light side of a group should be relieved against a dark background, and the dark side opposed to a light ground. This is a principle which has been adhered to more or less ever since, and if distinctness or relief is in harmony with the subject it is the best. But beautiful effects are obtained by the opposite treatment, where the lights are massed and the shadows united to give breadth. This does not in any way mean flatness, for within the two masses may be infinite gradations, each focusing in a strong accent of light and a forcible emphasis of dark. [Slide.] This slide exemplifies a few of the principal arrangements of light and shade. We first have the simple focusing of the light, which coming in contact with the darkest dark, is intensified by contrast. Below is a development of this principle, an effect used with such eminent success by Rembrandt. Here the principal light is near the centre of the picture, gradating to the extremities. Its brilliancy is greatly increased by the small, dark figure which is relieved against it, bringing, as it does, the culmination of all the shadow in direct contact with the brightest light. Above and on the other side is the equal division of the picture diagonally into the light and shadow mass, showing the device by which the balance is maintained, by carrying a small accent of dark into the light, and *vice versa*. The same principle is shown in the landscapes below.

The portrait group is a valuable study in the arrangement of small spots of light, of varying importance, in a dark mass. There should always be one principal light, to which the others will assume secondary importance either in size or strength; and agreeable form is of almost equal importance. [Slide.] In speaking of the general arrangement of light and shade, this slide affords an interesting example. In

both pictures the same disposition of the light and dark masses has been used, the general form of the lights is even similar, yet one is an upright and the other a horizontal composition, and with widely differing subjects.

CONTRASTS.

Strong contrasts look well from a distance, but are not always desirable. Contrast is a good quality for some subjects. It gives vivacity and sparkle, but it is lacking in repose, and too much will give the effect of fireworks. But we have seen that the concentration of the light to one portion of the picture gives great brilliancy, and at the same time increases the rich tones of the shadow. [Slide.] This effect of chiaro-oscuro is identified with Correggio. In his celebrated painting, "The Holy Night," he has secured by it great brilliancy and concentration. He was the first to make the light emanate from the infant Christ, typifying the dawn of Christianity and the words "I am the Light of the World." The eye is at once drawn to the centre of interest, but the gradual diffusion and gradation of the light is more gentle and subtle than when used for the same purpose by Rembrandt. It is a beautiful arrangement, for it also tends to unite the group of figures into one mass of light, surrounded and supported by the dark.

In the composing of groups you will find this a matter of the greatest importance. I spoke yesterday of the use of lines, that they should be agreeable and appropriate, and that they could be used to tie several figures together. Chiaro-oscuro accomplishes this even more forcibly, as by this means several figures may be made prominent in light, while others retire into more or less obscurity.

It was their perfect knowledge and their appreciation of the power of light and shade which enabled the Dutch painters to treat large portrait groups with such success. The corporation pictures of which I spoke before owe their interest to the fact that the figures are massed into groups within groups, and that the attention is first drawn to the most important figures.

Contrast these with specimens of photographic groups containing twenty or twenty-five figures, a graduating class, a visiting company of firemen, or Masonic lodge. These invariably, and undeniably, are extremely uninteresting as pictures. There is nothing to focus the attention in any one place, no massing of the lights, nor the corresponding foil of shadow, and the eye is forced to wander wearily from individual face to face. [Slide.]

Such is not the case in this large picture by Van der Helst, a portrait group of the "Civic Guard of Amsterdam." He has used his most important darks to call attention to the two principal figures, the Captain and the Standard-bearer of the Company. To the latter he gives still greater accent by the contrast of the light flag, the upper portion of which carries the light to the top of the picture. The rest of the company are disposed in irregular groups behind the table, and where the lights of the heads are not massed they are so disposed as to form agreeable lines.

UNITY.

The Dutch also were most successful in the use they made of light and shade to unite multiplicity of small objects. They probably introduced more detail into their small pictures than the painters of any other country, but they did not thereby destroy the large masses of light and shade, so that their pictures of the most commonplace subjects have interest. [Slide.]

In Rembrandt's "Anatomy Lesson" the eye is directed instantly to the faces of the surgeons, represented in strong light, for it was painted as a portrait group. The figure on the dissecting table is in the foreground, but a shadow is thrown over the head and feet, while the rest, although in light, is so simply treated that the eye passes over it to the group around and behind. Of the surgeons, the first seen is Dr. Tulp, the lecturer, whose dark hat and gown give brilliant relief to the face and hands, and so insist upon our attention. Another familiar group of portraits by the same master, known as "The Syndics," is a superb example of simplicity in grouping. In two figures of the central group you will find the hands united by an open book, introduced to spread the light.

In a small picture by Chardin called

"The Graces" we find the charming effect produced by clustering the lights. In it the lights of the figures are connected by the white table-cloth, while it is kept from being a spot by the subdued light on chair and wall.

Simplicity in tone and mass is a quality worth striving for. The result is well shown in the familiar portrait by Whistler of his mother. Everything there is expressed by the simplest masses, quiet, low in tone, and seemingly so in harmony with the quiet, dreamy figure of this elderly woman. It is a treatment thoroughly in accord with the subject. [Slide.] A more vigorous gathering of the light and shadow in broad masses is shown in this exquisite Madonna by Dagnan-Bouveret. The head linen and background join in one simple effect of light, while the mass of dark cloak is echoed by the small, but shapely, darks of the tools hanging on the wall. Aside from its mere technical excellences, it is to me one of the most satisfying Madonnas of modern art. [Slide.]

A large mass of light in a portrait surrounded by shadow and with very small echoing spots is shown in this portrait by Titian. Here the head and shoulders are in a flood of light which is extended by the arm and the white of the garment; they all unite into one mass. The hands and the sharp reflection in the mirror echo it faintly.

When arranging the light and shade of a picture, if you find your space is too evenly divided, dark-toned colors can be used to spread the dark masses, or the converse. Terburg is known by the white satin dress which he introduced as his principal light, while Wouwermans, in his hunting and battle pictures, grouped white horses to spread the effect. I have mentioned the use of a white table-cloth and light drapery to spread the light of the flesh, but the sky may also be used with charming effect, as you will find in a delightful picture of a child by Reynolds known as "The Age of Innocence."

### THE HANDS.

I have said little of the hands, yet they are a most important and difficult problem. If they do not form part of a larger mass of light, as they do in the "Lord Heathfield," "The Syndics," etc., they should be so placed that, even if receiving the same strength of light, the spots should be unequal. [Slide.] This problem could hardly be treated with more mastery than it is in this noble portrait of Sir Joshua Reynolds, by himself. One hand doubled and resting on the hip makes but a small spot of subdued light, while the other, extended and resting firmly on the table, is made more important by the roll of paper which it clasps. The dignity and amplitude of the figure is greatly increased by the action of that arm and hand. Imagine it withdrawn, and you will see at once how much character and dignity have been lost. The attention which has been drawn down by the hand is brought up again by the bust, the partial shadow on which unites it with the figure and, jutting up against the background, prevents the stronger dark of the cap, which it echoes, from becoming a harsh spot. The value of that dark mass relieved evenly against the background is, I am sure, very evident. It is but another and fine example of the attention which is inevitably drawn to the point where the deepest dark and most brilliant light are contrasted. The interruption of the light on the neck linen gives rotundity to the figure, while in its direction it leads the eye to the hand.

I might also call your attention here to the necessity of inequality in the margins. Never allow objects on the two sides of the pictures to be exactly the same distance from the edge. Perfect balance gives the effect of uniformity. [Slide.]

In bringing my remarks to a close I will show you this picture by Smirke, satirizing vanity and known as "Calling up a Look." It is gaiety pushed to caricature, yet all the resources of an accomplished artist have been used in its portrayal. Now, it would probably have found its way into "Life," but it was then thought worthy of being engraved in pure mezzotint. It emphasizes my very first remark to you, that the character of the model should indicate the style of the interpretation.

This able paper was received with earnest attention by the photographers present, and deserves careful study.—ED. W. P. M.

# PICTORIAL PHOTOGRAPHY.

## Its Past Progress and Present Position: A Last Century History.

BY ALFRED H. WALL.

THE inventors of the daguerreotype were a popular French artist and an obscure French experimental chemist named Niepce. For a long time they worked apart, both possessed by the one idea of rendering fugitive images obtained in a camera-obscura permanent, whether reflected from natural objects or from works of art. By a deed of partnership dated December, 1829, they combined forces and began to work harmoniously together, although each had a view-point distinctly his own. Daguerre dreamed of images mechanically produced, in forms, tones, and colors perfectly true to nature, but requiring the artist's knowledge, taste, and feeling to give them pictorial effect. Niepce's visions were of scientific applications in connection chiefly with optical and other purely scientific applications.

In the first number of the first photographic journal established to report the transactions of the first photographic society in London, edited by Arthur Henfrey, F.R.S., F.L.S., etc., published in March, 1853, we are told that photography was then awakening interest in every part of the world, and that both daguerreotypes taken on metal plates and photographs called after the name of an English inventor talbotypes were being produced in rapidly increasing quantities.

The talbotype was first suggested as a possibility when Sir Humphrey Davy and Mr. Wedgewood used a specially prepared paper sensitive to the chemical action of light. On this they contrived to produce the camera images, but they were unable to make them permanent. This was done in the year 1802.

In 1834 Mr. Talbot completed a nitrate of silver process, and with the agency of a solar microscope succeeded in obtaining images on paper which he had rendered permanent. His process was afterward patented and became known as the calotype process, but before that it had been called sometimes lucigraphy, afterward more frequently photography, or photogenic drawing. These productions were, pictorially, very inferior to Daguerre's. The talbotype was obtained by reversal, as the print was afterward from a negative, aided, however, not by a printing frame but by a camera.

*The Edinburgh Review* for January, 1843, commenting upon the position photography then held in its relationship to art, said: "When great inventions and discoveries in the arts and sciences either abridge or supersede labor, when they create new products or interfere with old ones, they are not on these accounts to be abandoned. The advance which is thus made involves not only a grand and irrevocable fact in the progress of both, but it is a step in the social march which can never be retraced. . . . The same law which closes one channel of labor necessarily opens up another, and that often through a richer domain, with a wider outlet; and in every substitution of mechanical for physical labor in which the ingenuity of his mind is combined with muscular power we recognize genuine progress. . . . When any one art is left behind in the race of improvement owing to the sloth and avarice of its cultivators, it can have no claim on the sympathy and protection of the community." The writer then goes on to say that his observations apply in a special manner to all great mechanical inventions, and are not less applicable to those remarkable improvements in the fine arts which the progress of science has so rapidly developed. "The arts of painting, sculpture, etc., exhibit in their progress a series of anomalies found in the history of no other pursuit," and in our own day extraordinary inventions and discoveries have already been given or will soon give a new form to the imitative arts. "By photography we obtain perfect representations of all objects, whether animate or inanimate, through the agency which they emit or reflect. From being at first a simple and not very interesting process of taking profiles of the human face, it has

called to its aid the highest resources of chemistry and physics, and, while it cannot fail to give a vigorous impulse to the fine arts, it has already become a powerful auxiliary in the prosecution of physical science, and holds out no slight hope of extending our knowledge of philosophical science. The art of photogeny, as it has been called, is, indeed, as great a step in the fine arts as the steam engine was in the mechanical arts; and we have no doubt that when its materials have become more sensitive and its processes more certain it will take the highest ranks amongst the inventions of the present age."

How truly this foreseeing has been realized we all know. The pictorial powers of photography were never more valued or cultivated than they now are, although every step we have made in advance—and I am old enough to have witnessed them all, and in some of them humbly but earnestly played my part—has been made in defiance of practical difficulties, thoughtlessness, and want of artistic knowledge and taste. Conceit and ignorance, jealousy and envy were also retarding forces. The artists who adopted photography were the first to discover its shortcomings, and this gave serious offence to the mechanical practitioners, who, being a very large majority, contrived to silence the artists and ignore their suggestions. It was, for instance, at once pointed out that the focal length of the non-achromatic lenses then in use gave images that the human eye did not convey to the retina, its focusing screen, or gave without the same proportionate magnitude. *The Edinburgh Review*, from which I have already quoted, puts it thus: "It is not merely the minuteness of delineation that surprises us in the daguerreotype. Every object is seen in its true geometrical perspective, and even the aerial perspective is displayed in the diminution of sharpness which marks the appearance of all objects as they recede from the eye. The combination of these two effects gives depth—a third dimension—to the picture which it is scarcely possible to conceive without actually seeing it."

One of the earliest improvements made by Daguerre, as the result of a series of experiments, was that of electrifying the plate so that the action of light on the film of iodine was instantaneous. M. Edmund Becquerel also made discoveries by a series of experiments upon colors in the rays of light with the same end in view. He used to under-expose his plate, and then by subjecting it to the action of light passed through red glass for a few minutes obtain the same result as if it had received exposure of the usual length. M. Claudet, then in London with a studio in the Adelaide Gallery, found the sensitiveness could be greatly increased by subjecting it to the action of bromine. This was done about fifteen years after the daguerreotype was first introduced to public notice. This advanced portraiture in the photographic domain to a far superior position. Before that, as a critic writing in one of the chief magazines complained, portraits were neither true to nature nor pleasing to look at. He said:

"A look of distress pervaded almost every feature; the eyes exposed to the strongest light were half closed; the muscles of the cheeks were drawn up; and wrinkles not visible in the sitter's face disfigured even the smoothly expanded brows of the youthful and beautiful. It was found that as the time of the plate's exposure in the camera decreased these defects were removed."

M. Arago, in his interview with Daguerre, found him generously confiding when explaining a series of experiments the painter was then engaged upon for the improvement of his photographic invention. The painter had no secrets, he said, and generously believed he was doing his duty to his fellow-man by refusing to take out patents. This should be remembered, because it is still a fashion in certain semi-scientific circles to sneer at Daguerre as being an artist only, with no real scientific knowledge. The French Government had no such belief when, acting upon a suggestion made by the above-named eminent philosopher, it awarded, in 1839, a yearly pension of 4000 francs in recognition to Daguerre, and on his suggestion a like one to his partner, Niepce, whose poverty was then at its worst stage. This pension was afterward raised to 6000 francs. The government fully recognized the services as artistically valuable. In the report of the Peers were the following words:

"It is the origin of a new art in the middle of an old civilization—an art which will constitute an era, and be preserved as a title of glory. And shall it descend to posterity accompanied with ingratitude? No. Let it rather stand forth a splendid evidence of the protection which the Chambers, the Government of July, the whole country, offered to great inventors. It is in reality an act of national munificence which consecrates the bill in favor of Daguerre. We have given it our unanimous assent, yet not without marking how elevated and honorable is a reward voted by a nation."

M. Arago says emphatically with reference to this award: "From the first moment France has cherished a pride in liberally bestowing this pension and giving to *the whole world* this wonderful invention."

It is curious and not at all pleasant to note that directly it was known that France had given the daguerreotype process thus freely to all people, a Frenchman instructed a lawyer in England to secure it for him by taking out a patent. I wish I knew his name, but he failed, and was allowed to remain unknown. Some of Daguerre's depreciatory and unscrupulously slanderous opponents strove to spread abroad a belief that the Frenchman in question was Daguerre himself.

That Talbot also regarded photography from its pictorial rather than its scientific point of view is clearly seen in the first account he gave of it, which he called "Some Account of the Art of Photogenic Drawing, or the process by which natural objects may be made to delineate themselves without the aid of the artist's pencil." This paper was read to the Royal Society in January, 1839, and was, in March of that year, published in the *London and Edinburgh Philosophic Magazine*. The talbotype process was patented, and one of the most famous miniature painters of that time produced portraits, of which a well-known critic wrote: "They are infinitely superior to the finest miniatures that have ever been painted. Devoting his chief attention to the correct and agreeable delineation of the face and features by the action of light alone, he corrects any imperfection in the drapery or supplies any defect in the figure by his professional skill, so that his works have an entirely different aspect from those of the amateur or inartistic photographer, who must, generally speaking, be content with the result which the camera and chemical process give him. In making this comparison," this same critic goes on to say, "we do not pretend to assert that *perfect pictures*, landscapes or portraits, cannot be produced without additional touches from the pencil of the artist. . . We have before us a collection of admirable photographs executed at St. Andrew's by Dr. and Mr. Robert Adamson (both being professional photographers), Major Playfair, and Captain Brewster. Several of these have all the force and beauty of the sketches of Rembrandt, and some of them have been pronounced by Mr. Talbot himself to be amongst the best he has seen."

At the inaugural meeting of the Photographic Society in London the pictorial character of the new art was again recognized in very honorable fashion. The President of the Royal Academy was also its President, and in the course of his address delivered to a crowded assembly in the great room of the Society of Arts, in John Street, Adelphi, on Thursday, the 20th of January, 1853, he said:

"I conceive it to be unnecessary in an assembly like this to say one word of the uses and advances of photography both to science and to art." Mr. Fenton, an enthusiastically artistic photographer, was elected as Secretary, and one of the most celebrated miniature painters of the day, Sir William J. Newton, as Vice-President. Both were amongst the speakers, and the announcement that Mr. Fox Talbot had abandoned his patent was received with cheers.

The first paper read at the first ordinary meeting further emphasized the artistic and pictorial pretensions of the new art. It was written by the Vice-President, and its title was "Upon Photography in an Artistic View and in its Relationship to the Arts," and its preliminary announcement asserted that it had been prepared "with a view to establish that photography can only be considered as a science to those who investigate its properties, but that to the public its results as depicting natural

objects ought to be in accordance, as far as it is possible, with the acknowledged principles of fine art."

In the course of this paper the worthy Vice-President said: "Who has not studied nature so much as to observe how beautifully she throws her atmospheric veil, detaching each object, while producing that harmony and union of parts which the most splendid specimen of mere chemical photography fails to realize; consequently, at present it is vain to look for that true representation of light and shade on photography which is to be found in a true and fine work of art. . . Let the operator devise or discover the means whereby he can produce his pictures still more minutely perfect in tone and detail. . . . But he must ever remember that his subjects are principally natural objects powerfully acted upon by atmospheric influences. . . . It must always be borne in mind that, essentially speaking, the camera is by no means calculated to teach the principles of art, but to those who are already well informed in this respect such knowledge may be made the means of genuine advancement. . . Wonderful as the powers of the camera are, we have not yet attained that degree of pictorial perfection so as to represent faithfully the tones of colors, and, therefore, the real characteristics of light and shade. . . . Consequently, I conceive that when a tolerably faithful and picturesque effect can be obtained by chemical or mechanical process outside the ordinary operations applied to the negative, the photographer is at full liberty to use his own discretion." He also advised operators to retouch the skies.

Nowadays the Vice-President's advice has been followed, but at the time when it was given it was scornfully rejected, and the editor of the Society's journal appended a notice which announced that the Council should not be held responsible for its opinions.

Nowadays, when pictorial photography is a much debated question, it is interesting to recall that at the very inception of the art its pictorial possibilities and pictorial limitations were alike examined and discussed, as this early chapter from the days of the daguerreotype and calotype clearly shows. Nor has the question ever dropped, although in the greater quantity of professional work mere commercialism ever has, and perhaps ever must, hold the more observed position. Some day I may possibly continue the history of pictorial photography and its association with well-known camera men of a too rapidly diminishing generation, showing when and how mischievous influences were exercised to rob it of those pretensions to pictorial possibilities, excellences, and fine art pretensions, and how those who fought against it gradually became victorious, showing that science and art might combine to attain their highest and most valuable standards without the one being even in the slightest degree depreciative of the other.

## NEWS FROM THE CRAFT.

D. D. Spellman, of Detroit, is equiping a new studio which he is determined shall be one of the largest and finest ever seen in the city. He has secured the whole of the top floor of the Eaton Building, and alterations are already under way. The operating room will have four unobstructed walls, an advantage not possessed by any other studio in Detroit. This will enable Mr. Spellman to take advantage of both the early morning and the late afternoon sun. In addition the room will be fitted for doing work by electric light. Mr. Spellman is aiming to so arrange his apartments as to bring forward as much of the studio effect as possible and as little of the idea of the store. The whole will be arranged after the latest ideas.

There will be two exhibition rooms, one 20 x 20 feet. All business will be transacted in a separate office. Another feature which is somewhat new will be an exhibition gallery in which the special features of photographer's work may be seen. Mr. Spellman expects to get into his new apartments about May 1 and at that time will have a public opening.

Mr. Spellman has been a hard worker and has won a high place in the profession by his beautiful work. We wish him every success.

Mr. J. C. Strauss gave at his new gallery in St. Louis, April 11th to 13th inclusive, an exhibition of portraits "by a novel and beautiful process," which, we learn, excited much curiosity and admiration. We are not enlightened as to the nature of the process used. In an early number we propose to describe the new Strauss studio with illustrations. As described to us the place exceeds in beauty the famous gallery destroyed by fire over a year ago.

Messrs. Pach Bros., of New York, are about to open an elegantly appointed studio in the new Windsor Arcade, on Fifth Avenue. This gallery will cater to the aristocratic uptown trade of the metropolis, the large establishment at 935 Broadway being retained by downtown business and general work-rooms for the "finishing" required by the many galleries operated by Pach Bros.

A very dainty folder comes from the Van Loo studio, Toledo, O., recently equipped by Mr. W. F. Van Loo. It consists of a piece of mount board of pleasing tone folded once at the centre, and is embellished with a miniature carbon portrait on celluloid, printed in sea green, and displaying an attractive pose. Such folders make persuasive advertisements.

Mr. E. L. Mix, formerly with Pach Bros., has accepted a position with Marceau, on Fifth Avenue, where he will have charge of the platinotype department. Mr. Mix is one of the most capable young men in the profession as far as printing is concerned, and we note his progress with pleasure.

The Rosser studio, Pittsburg, recently held an exhibition of miniatures by Sprague as a means of drawing the art-loving public to the gallery. A neat folder announced the exhibition, which proved itself to be a great success.

Maxwell & Mudge, Fresno, Cal., send to our table an interesting folder entitled "Practical advice to sitters for photographs." The folder is illustrated throughout, and looks like a business bringer.

An attractive display of portraits by thirty American photographers of prominence, recently given at the studio of Mr. Edmondson, Cleveland, Ohio, proved a most successful means of drawing attention to Mr. Edmondson's beautiful gallery. These exhibitions are quite a feature among the business methods of the leading studios and commend themselves as perhaps the most effective and tasteful method of advertising open to the professional worker.

Mr. Herbert F. Watkin, an enthusiastic English reader of the MAGAZINE, sends us his price list, from which we are glad to note that he is obtaining very satisfactory remuneration for his work. Mr. Watkin makes a specialty of sepia platinum portraits, and we have seen some excellent examples of work from his studio, which is located at Scarborough, a fashionable resort on the east coast

An unusual opportunity for an enterprising photographer possessed of skill and money may be heard of by addressing the office of this MAGAZINE. The opening is the purchase of a high-class business on Fifth Avenue, New York, long established and of excellent reputation.

The British photographer is "up against things," to his sorrow. Some time ago an enterprising firm persuaded sundry newspapers to give enlargements in return for coupons and a nominal amount in cash. Now a firm, presumably the same, is engineering in other lines. They have already persuaded two firms—one selling soap and the other cigarettes—to take up the photography premium idea. In exchange for 60 cents and certain wrappers these firms will supply a dozen mounted bromides, cabinet size. The original photograph has to be supplied by the customer, with a somewhat full written declaration, the latter presumably as a protection against copyright infringement. Verily our British brethren have much to worry them, and the unfortunate part of the business is that too large a number of them are content to remain in just that state of semi-competency which so soon suffers from any cut rate or similar cheap scheme.

If everything goes wrong all the time get out of photography and start a shoe store.

PORTRAIT

By Louis Walker, Philadelphia

VASHTI EARL

Copyright, 1898, by J. Schloss, New York

PORTRAIT

By W. W. Cowles, Seneca Falls, N. Y.

CHILD PORTRAITURE

By W. N. Brenner, Cincinnati

CHILD PORTRAITURE
By F. M. Somers, Cincinnati

PORTRAIT

By A. N. Camp, Jamestown, N. Y.

COMMERCIAL PHOTOGRAPHY

By Schreiber & Sons, Philadelphia

EVENING IN JUNE

By J. H. Field, Berlin, Wis.

## ADVERTISING WITHOUT PRINTERS' INK.

An old and valued reader writes that the tone of many articles published in the magazines during the last months seem to suggest that all photographers should be leaders, and that too little attention is paid to the great preponderance of workers who must, in the inevitable nature of things, remain in obscure or local conditions.

We do not think that the small man has been neglected; many hints, suggestions and ideas have been given to him; but more than this, the articles complained of are surely intended for the small man rather than for those whose work or methods they describe. If they are read more critically it will be noticed that very little space is given to describing business in which a plentiful capital is the chief factor toward success, and much space is devoted to those businesses which have been built up from small beginnings and where the personal work of the man has proved the factor. Nothing is easier than photography when swung with sufficient capital. If Carnegie or Pierpont Morgan wished to become "artist photographers" they might do it by instructing an agent to draw on them for any money required, and then go abroad for twelve months. On their return, if their agent knew his business, they would find themselves successful photographic artists. Such a business, however, would be of no practical use to the common run of photographers, and would not therefore be described except as a matter of news.

It is a mistake to suppose that because a man is in a small place he can have no use for readings and suggestions. Some of our best workers are in comparatively small cities—they have too much common-sense to indulge in the expensive experiment of a Fifth Avenue fever—and there are many men who are doing good work, and contentedly making a comfortable living in very small towns. Too many men, however, are *not* making a comfortable living; there is just a little tightness in things sometimes, and such things are far from pleasant. Were this inevitable it might well pass without mention; but very often such things can be remedied. The mistake too often made is in waiting for business to come to the studio instead of in some way endeavoring to *make* business come to the studio. How to *make* it come, that is the question.

Advertising is often advocated. We are apt to associate advertising with printed circulars or announcements in the newspapers. Such advertising is undoubtedly good if managed with brains; but we have seen some advertising matter which could scarcely result in anything but loss. Printed paper is not what we are considering at present. Perhaps publicity would be a better word than advertising, for the desire is to get yourself and your work before the public, and this can be done in a score of ways, often without the expenditure of money. If every person coming to be photographed were to see something at the studio which they did not expect and which interested them the talk which they made about it on returning home would be so much publicity.

The show-window is one of the things which should be made useful to the photographer. Have you ever noticed how the children cluster around it when Mamie's portrait is on show. It is often a tactful compliment, when a proof is submitted and accepted, to say a few words in commendation of it—of course of the subject rather than of the print—and ask permission to exhibit a print in the window for a few weeks. A print could just as easily be exhibited without the asking, but the latter is a useful little publicity which costs nothing. Depend upon it that in most cases the slight flattery and implied compliment will create a pleasant impression in the mind of the customer, and its odds if you are not described to friends as a most elegant man. This is just one of the advantages of being up to date with the show-window. Don't let it take care of itself. A graceful move is in all the older States to fill the window with topical subjects on Decoration day. Have you any prints of veterans, especially those who have passed away. Let them be shown, with prints of Grant and Sherman

and Lee and Stonewall Jackson—and people will come to look at them. In many quiet ways the show-window can be made to attract notice, but it is only one of many possibilities; and as only too often the photographer has spare time on his hands he should be able to plan how to use it to advantage without any outlay of money. In many small towns there are, unfortunately, many days on which no sitter comes to the studio. Sometimes the man will build himself a tent and go to still smaller villages and stay for a few days or a week. This business, or a modification of it, might be more widely tried. Let the studio be open three days a week, including Saturday. Also at any time "by appointment"—such an announcement sounds well—or on wage-paying days and market days or other special occasions. On the off days take the lightest camera you've got—if you have more than one—and borrow a buggy or get a lift out of town two or three miles. Then drop off and visit a little while at some farmer's. They'll be glad to see you, and if there's any money in the house you may take a photograph of the stoop, with the whole family upon it. If not, you will have made friends who will likely come to you when they want photographs. In a day you may visit several houses, and you may be sure that if you know how to talk business the day will pay; and it will be all found money, for otherwise the day would have been half-wasted at home. If there are children in the house you will be sure to interest the mother. You may not do any business then, but you may get her promise to come to the studio when the children are dressed up and washed and curled. If there are young women in the house they will try their best to be photographed.

These are just a few suggestions, and it is as suggestions that they are intended, not as definite and universally recommended lines to be followed. But some such plans should be adopted and effort made to bring business into the studio, instead of waiting for it. What efforts? That must be decided by the man, for he knows his locality and his neighbors. He must think it out for himself. In the magazines for the last few years he has seen many suggestions—novelties, leading lines, special methods. Let him read through them and think over them. It may be that he will not adopt any one of them, but that they will suggest some other scheme to him. There are many ways of getting out of the rut by the expenditure of a little time and thought, rather than of money.

In the opening paragraphs we spoke of why the work of successful men was so frequently referred to; it is by the reading of such accounts, as much as by the reading of methods for making imitation tintypes or other novelties, that ideas and inspirations come. Let the "little" man then not neglect to read, always steadily bearing in mind that it is to his own "think-pan" that he must turn to find a particular application of any suggested method.

## DEPTH: AN ELEMENTARY CHAPTER ON OPTICS.

"THE other lens you name has excellent definition in one plane, but it has less of that quality known as depth of focus."—*Mr. H. C. Shelley, in the Glasgow Evening Times.*

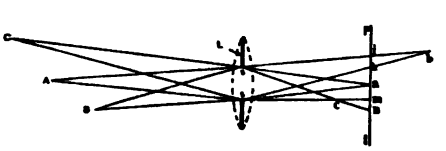
In the sentence that we have quoted at the head of this paper a statement is made the absurdity of which, as our readers may remember, we pointed out at the time. We then promised that we would give an elementary article upon the subject for the benefit of those, few in number we feel sure, who may think that in "the quality known as depth of focus" one form of lens may be superior to another. In the old days salesmen were often known to recommend some particular make that they wanted to sell on this score; but dealers have long since found it to their interest to employ for selling their wares gentlemen who are able to speak, if not with profound knowledge, at least with an acquaintance with techniques sufficient to prevent them from making glaring errors. We have no doubt that in time even our daily contem-

poraries will find a similar course to their advantage and to that of their readers. Some have already done so.

We must preface the remarks which follow with a request to those who may just glance at them and feel inclined to go no further to persevere. We have kept down to a minimum the A B C *x y z* which seems to frighten so many away from any article on optics, and there will be found little or nothing that should not make itself quite clear with the help of the figure.

When we focus with a lens L on a particular object point, A, no farther or nearer object can, theoretically, be in focus at the same time on the plate *p l*. For the true focus of a nearer point B is behind the plate at *b*, and that of a farther point C is in front of the plate at *c*, so that there is only a blurred patch *i k* to represent *b*, and a similar patch *m n* to represent *c*. It is obvious, however, that if these blurred patches are very small we shall barely be able to distinguish them from these points, and in such a case we may consider that the points C and B are practically in focus, though knowing them actually not to be so.

The size of each of these blurred patches depends, obviously, on three factors—the distance of the true focus point from the plate, the distance of the plate from the lens, and the size of the diaphragm *s s*, which limits the diameter of the light pencil. If we consider both the size of the aperture and the distance of the plate to be fixed, then the farther C is from the lens the farther is *c* from the plate and the bigger is the blur; hence, if we fix on some maximum permissible size for *m n*, C must not be beyond a certain distance from the lens. Again, the nearer B is to the lens, the farther is B from the plate and the greater is *i k*; if, then, we limit *i k* similarly to *m n*,



we also limit the nearness of B to the lens. The distance from the nearest permissible position of B to the farthest permissible position of C is the total "depth of field" available when focusing with the lens L on the point A with an aperture equal to *s s*, and limiting the confusion of focus to the extent of *m n* or *i k*.

If we know the distance of A from the lens, the focal length of the latter, and the size of the aperture *s s*, and assign a certain limited value to *m n* or *i k*, we can easily arrive at formulæ expressing the distances of B and C from the lens, which distances are sufficient to indicate the amount of the depth of field; the distance of B fixing near depth, and that of C far depth.

A point to be particularly observed is the fact that we can exercise discretion as to the exact amount of permissible confusion. Much depends upon the purpose of the photograph, but for general work we may assume that reasonable sharpness exists if the image is not blurred or widened to an extent exceeding one-hundredth of an inch. This means that an infinitely small point will be represented by a "disk of confusion" not exceeding one-hundredth of an inch in diameter. This is the standard taken in the usual formulæ relating to depth. Such formulæ, when accurate, are somewhat complicated, but by adopting approximate formulæ we can very much simplify matters without introducing any errors of moment.

Let $f$ represent the focal length of the lens, let the diameter of the aperture be represented as a fraction of $f$ in the form $f/a$, and let the allowable confusion be one-hundredth of an inch. Then, in the particular case of focusing on an infinitely distant object, the distance of the nearest point in approximate focus is equal to $\frac{100f^2}{a}$. This should be measured from the front node of the lens; but if we measure it from the front principal focus, the error is only one focal length and is negligible.

Suppose we have a six-inch lens of aperture $f/10$. Then, $f = 6$ in., $a = 10$, and $\frac{100f^2}{a} = 30$ feet. Therefore, when focusing on an infinite distance with a six-inch lens and stop $f/10$, the depth of field extends from thirty feet to infinity. This distance may be described as the depth constant for that particular lens and stop, for the quantity $\frac{100f^2}{a}$ appears in every depth formula for either near or distant objects. A

knowledge of the value of this constant is all that we practically need to determine, with very approximate accuracy, the depth when focusing on any distance. Suppose we represent the depth constant by the symbol H, then, as we have just seen, when we focus on infinity the depth of field extends from a distance equal to H up to infinity. If, however, we focus on a distance equal to H, depth extends from $\frac{H}{2}$ up to infinity, which is then the limit of far depth. If we focus on a distance equal to $\frac{H}{2}$, depth extends from $\frac{H}{3}$ to H; and if we focus on a distance equal to $\frac{H}{3}$, depth extends from $\frac{H}{4}$ to $\frac{H}{2}$, and so on with any other shorter distances.

As an example, assume, as before, the depth constant to be 30 feet. If we focus on $\frac{30}{3}$ or 10 feet, depth extends from $\frac{30}{4}$ or 7½ feet up to $\frac{30}{2}$ or 15 feet. These results are approximate, but if we always measure from the front principal focus of the lens the error is always on the safe side, never exceeds one focal length (or 6 inches in the selected example), and diminishes with the distance on which we focus.

If we are able to select the distance of the object so as to make it a fractional part of the depth constant, this simple method of ascertaining the depth can be easily applied; but if we are obliged to take some other distance, the following simple formulæ give equally approximate results: Let the distance on which we focus be represented by $d$; then the distance limiting near depth is equal to $\frac{Hd}{H+d}$. The distance limiting far depth is equal to $\frac{Hd}{H-d}$. Taking the constant as again equal to 30 feet, let $d = 12$ feet, then depth extends from $\frac{30 \times 12}{30 + 12}$, or 8 ft. 7 in. to $\frac{30 \times 12}{30 - 12}$, or 16 ft. 4 in.; or, we may say, from 8½ ft. to 16½ ft.

If we express the depth constant as $\frac{100f^2}{a}$, it is obvious that it is equal to the focal length multiplied by the diameter of the aperture and divided by the diameter of the circle of confusion. It is equally obvious that the greater the depth constant the less is the depth. Therefore, we can deduce the following rules:

1. Depth increases if we reduce the focal length or the stop, or increase the amount of permissible confusion; and it decreases with inverse variations in one or more of those three factors.

2. Depth remains unaltered if an increase in focal length is accompanied by a proportional decrease in aperture; hence, an 8-inch lens with 1-inch aperture (or at $f/8$) gives the same depth as a 16-inch lens with ½-inch aperture (or at $f/32$). Or depth is constant if the product of focal length into aperture diameter is constant ($8 \times 1 = 16 \times ½$).

3. Depth varies solely with the diameter of the aperture if we permit the amount of confusion to vary with the focal length. In such a case definition is permitted to vary roughly with the scale of the image, on the assumption that a small scale image requires finer definition than a large scale image.

It will be seen from this that the formulæ take no account of the type of lens. It may be a stigmatic, giving the finest definition, or a cheap lens just good enough to satisfy the requirements of the everyday photographer. The reader will, therefore, be safe in assuming either that his informant knows nothing about the subject with which he presumes to deal, or has some motive for misleading should the old tale about depth of focus be revived in his hearing.

One point in connection with these formulæ must be mentioned before we leave the subject. Complaints are sometimes made that when tested with the camera depth formulæ give very incorrect results. This is sometimes due to want of accurate measurement of focal length, aperture, or distance, but in most cases it is probably due to aberration. All the formulæ assume that aberration is absent, and they, therefore, fail if that is not the case. They would apply to all portions of the field with an ideally perfect flat field lens; but if oblique pencils are deficient by reason of the existence of any form of aberration, then the depth formulæ apply only to the centre of the image field, and fail in the case of near or distant objects that are represented near the margins of the plate. The better the lens, therefore, the more accurate will be the results given by the formulæ.

It may be noted that depth of field, as described in this article, is often styled depth of focus, and sometimes depth of distance. Depth of focus is more properly applicable to another kind of depth, also called depth of definition. It can be shown that a focus has a certain amount of depth, within the limits of which the focusing screen must be placed if we allow a certain maximum amount of permissible confusion. This is quite a distinct matter from depth of field, though the two kinds of depth are often confounded. Sometimes depth of focus or definition formulæ are given in mistake for those belonging to depth of field. The two sets of formulæ differ to a slight extent, and the approximate formulæ given in this article are a compromise between the two.—*Photography.*

## PANORAMIC PHOTOGRAPHS.

BY TURNER YALDING.

MUCH interest has been evinced in panoramic photographs, and the verdict appears to be that they must be produced with a specially constructed camera on a length of film, or that they must present an unsatisfactory appearance owing to the impossibility of obtaining prints from two or more negatives, absolutely equal in depth, and without obviously showing the joining marks. That this verdict is not altogether correct is shown by the appearance, from American and Continental workers, of panoramas of large size and several joinings, the different sections of which have been taken on separate glass negatives and printed, one section at a time, so carefully that neither by variation of tone nor error of perspective can any joining be observed. Many of the very large panoramic pictures illustrating American railroads, which we see in the windows of shipping agencies, are made by this method. If a photographer examines them closely he will see how they have been done, but to the general public the building-up is invisible, and to the expert it is acceptable because of the admirable way in which it is done. It is rather interesting to find that there is absolutely no secret about a method that has long puzzled many photographers. Those men who have made a name and money by panoramic pictures have gone about it in the simplest and most direct way, and their only secret has been the care with which they have got even negatives and afterward printed them with a correct vignetting of the joinings.

The only special apparatus needed for panoramic photography is a printing frame with a dark chamber at each end, in which the paper printed or to be printed may be stored—for the printing is done from one negative at a time.

Any camera, on a tripod, will do. Rigidity is, of course, a first essential, and it will be well if the tripod head is as large as or larger than the baseboard, as the camera is moved between exposures. The camera must be absolutely true, vertically and horizontally; and here it may be hinted, for the benefit of the amateur, that all minor parts such as levels and finders should be quite, and not merely approximately, correct. If these details are not attended to trouble will commence with the printing. The ground-glass must be marked with a joining line at each edge parallel and at a little distance from the edge. In a one-quarter plate camera this line may be about three-quarters of an inch from the edge; in a one-half plate an inch will not be too much. The space between these lines will, on a one-quarter plate, be three inches, and in taking the different negatives they must overlap at this point, the marginal three-quarters of an inch being used for blending or vignetting one negative into the other when printing.

The lens used should be a long focus one, at least one and a half times the diagonal of the plate, and better still twice the diagonal. It is not well to include too many degrees, or too violent perspective, in a panoramic picture. It is, too, more difficult to arrange the blending points of the negatives if a short focus lens is used.

It is in landscape work that panoramic

photography scores its best achievements, but as the simplest method is portraiture I will mention it first. By using an evenly colored (preferably gray) "continuous" background it will be possible to take any number of portraits, and by developing the negatives evenly to print a continuous string of them, and at each printing blend the background absolutely. Something of this kind is often done with portraits of children, but the pictures are usually treated as so many separate vignettes, the different printings and joinings being frankly acknowledged.

In choosing a landscape or street scene the important point is not to show any angle where a straight line should be. If we have, for instance, the edge of a pavement in the foreground, running exactly at right angles to the lens, it would appear in the negative as parallel to the bottom edge of the plate. When we turned the camera so that it faced the pavement diagonally the direction of the pavememt would turn on the negative, and in the print we should have a slight angle where none should be. This is minimized by the use of a long focus lens, and is overcome by the judicious selection of the operator. Where there are any aggressively straight lines they should be confined if possible to one plate, and let the joining of the negative come where there is some vertical object, say a corner of a building, a telegraph pole, or, easiest of all, a tree. Unless objects are in the near foreground the deflection of line will be so slight as to be negligible.

Suppose the view to be chosen. Let the camera be carefully levelled, horizontally and vertically, and focused on the left hand section of the view. As only one side of this negative will be blended, it is obvious that the left hand boundary of the landscape may extend to the edge of the plate. As soon as the picture is accurately focused—preferably using a small stop—let the focusing screw be tightened so that there shall be no slipping.

The right side of this section of the view will fall on the left of the ground-glass, and the exact part which comes under the joining line must be carefully noted. If an absolutely perpendicular line falls on it, well and good; if not, carefully notice two points, one as low and the other as right as possible on the glass, which both fall on the line. When these points are noted, turn the camera toward the second section of the view until the points fall on the line to the *right* of the ground-glass. If *both* the points are still exactly in line the camera may be considered level? If they are not, it must be adjusted more carefully. The third or any subsequent sections of the view may be checked in like manner. Now that the camera is fixed and the exact dividing lines decided on, turn the lens toward the first view and make an exposure; similarly take the second and the third exposures. Such is the principal of exposure. Several obvious helps will suggest themselves, and first it is presumed that anyone making his first panorama will content himself with two negatives and the simplicity of a single joining. Instead of selecting the view on the ground-glass between each exposure, a line should be ruled, with a soft crayon or pencil, on the baseboard along the side of the camera as each section of view is first decided. By turning the camera to these lines the view will be correctly centred without after reference to the ground-glass. To make two or more exposures quite equal means patience. One part of the view may remain in shade, or the intensity of the light may vary in aggravating fashion. The only remedy is patience, with the added precaution of a duplicate set of negatives if any doubt is felt as to the correctness of exposures.

In development the one thing to be aimed at is uniform printing quality, and to attain this all the plates should be developed at the same time, and preferably in the same dish. If the exposures have been equal—and they probably will have been if a small stop has been used, with a time exposure—the negatives should come up evenly. If, however, there is any unevenness in the negatives they must be worked up until they reach the desired uniformity. The whole secret of panoramic photography is care at every stage, and if everything does not come up perfectly it must be coaxed or restrained or altered until the defect is got rid of.

The method of printing is simplicity itself, the only difficulty being that care and close attention are required. One nega-

tive is printed at a time, and as soon as the print is carried far enough a second negative is placed in the frame and the next strip of paper placed under it, the vignetted end of the first part being very carefully registered over the commencement of the second part.

First, the points of joining must be chosen. Take a retouching frame with a large square opening and lay a sheet of clear glass in the opening. On this place the two negatives, the lower edge of one on the upper edge of the other, sliding the upper one along until the chosen points of joining are exactly over one another. The points should be those first selected when arranging the view and proving the camera square, but any other points will of course be permissible. See that they are absolutely in line by laying a straight edge across both negatives, and make a slight scratch on the films as a register mark. Make a similar scratch on the glass slide of the negative, just far enough from the margin not to be hidden by the rebate of the printing frame.

The printing frame is the only piece of special apparatus. That sold by Mellen, of Chicago, is practical and convenient for the purpose. The frame must have at each end a dark chamber, in which the spare length of paper is to be stored. The opening should preferably be square, to allow of negatives either upright or landscape, and the rebate should be sufficiently deep to take a plate of glass, a thin mask the size of the negative, to block out any possibility of reflected light around the edges, and the negative itself. The film of the negative should be flush with the rebate, so that when the back of the frame is clamped down no mark is made on the paper as it passes into the dark chambers. On the face of the printing frame are two vignetters—straight strips of wood—parallel to each other, and movable backward and forward across the face of the negative. The first negative is placed in the frame with the end of a strip of paper behind it. As only one edge of this has to be vignetted, one of the vignetters may be pushed back out of the way, and the other slid exactly over the scratch in the glass which marks the joining line. Printing should be in sunlight, and the face of the frame must be kept turned full to the sun. But it should be covered with one or two thicknesses of tissue paper to diffuse the light. This obtaining of the light from what is practically a fixed point facilitates the vignetting. When printing is sufficient the negative is removed, and the second one placed in the frame. The paper is moved on so that the second section covers the negative. Registration at the joining place must be exact, both the guide-marks and the sky line being carefully in register. Those who have accidentally moved a paper when examining it in the printing frame know the difficulty of registration. In this case the matter is simplified, as registration is only on one straight line. This new negative will cover, within its field, a portion of print vignetted off from the first negative, and the half or three-quarters of an inch beyond the joining line will similarly cover a portion of the first negative, so that vignetting is spread over a breadth of an inch, with a crucial point at the joining. When the whole is firmly clamped in position, move the vignetters—both will be used this time—over the two scratches marking the limits of the picture, and again put out to print. The progress of work must now be very carefully watched, for the depth of the two prints must be identical. If the joining begins to print too dark the vignetter should be moved forward a trifle; if too light, moved back.

When the second one is printed the third negative takes its place, and here again vignetting is on one margin only.

It may be that one of the sections has been carried a little too far. If so, take a tray long enough to contain the entire print, flood the print with water, and tilt the dish so that the dark section is out of the water. Then with a *very* weak solution of Farmer's reducer go *very* gently over the print, using a wad of cotton-wool. The moment the print is sufficiently reduced flush the water over it. Then wash well in running water or in several changes.

Such is the method of producing panoramic pictures as used by Jackson and others, who, with their enormous productions, have added a new branch to railroad advertising. There is absolutely no secret. The men do the work themselves, or with the help of one or more really competent

assistants, and their joinings are got merely by careful work.

The advantage of such a method over the usual one of making several prints and trimming them to match is obvious. The paper is one continuous strip, and the joining much better concealed. For a photographer in a country place, who does a trade in local views, the panorama offers a profitable specialty. If development papers are used, there is a rather different problem of matching. When the first negative is placed in the frame, fasten down one-half of the back, and with a sharp soft pencil sketch on the back of the paper, holding the frame against a yellow light, where the sky line comes, and several other lines or marks, which can be used in registering the second negative. Such work, it is needless to say, will require a very sure hand and very accurate tracing.

There is an amateur dodge which I may mention here, although it is fairly well known, and is not strictly panoramic photography. To overcome the difficulty of the old-time joints, it is a good plan to boldly beg the question by mounting the pictures separately. Leave, say a quarter of an inch of mount between each print, and the result will be much better than a weak attempt at concealment.—*Photographic News.*

## NEWS AND NOTES.

*A Point in Development.* A very common habit with photographers—especially amateur photographers—is to wet their plates in water before developing. The reason for this is presumably to let the developer flow more quickly and evenly over the whole surface when the plate is immersed. Where the plate is dropped directly into the developer, unless the dish is very energetically rocked parts of the plate may remain uncovered for a few seconds, owing to the greasy, repellant nature of the film. Fine "contour" lines will mark, in the finished negative and the print, where the developer did not flow. This plan of previous wetting is wrong and for a very simple but important reason. When the plate is put direct into the developer the latter as it gradually penetrates the film does its work. If the plate is already soaked with water there is no absorption of the developer into a film already wet, and action is to a very large extent superficial. In many cases it is doubtful if the developer really reaches the glass side of the film. The proper remedy for "contour lines" is to use sufficient developer to rapidly cover the plate, and give the dish a twist so that the developer really does flow over the entire surface of the plate the moment the latter is laid in the dish.

*Copying Lantern Slides by Contact.* To unbind lantern slides in order to make a contact print is a certain amount of trouble, and copying in the camera is a tedious work. It is fortunately possible to make contact copies through the cover glass, the thickness of which may be ignored. The dodge is to use a *point* of light as the illuminant, and let that point be bright. About a six-volt electric light at a distance of four feet will throw rays which are to all intents and purposes parallel, and will transfer the finest detail without any tendency to blur of lines. It will be seen from this that reversed negatives or reversed prints from negatives may be quite easily obtained. A number of slides or negatives, provided they are of equal density, may be printed at one time. Lay the plates face up on a table under the electric light and over each one lay the lantern slide, and then turn on the light. Of course, the light must be firmly fixed—no swinging. For daylight work a light tight box with a "pinhole" opening has been suggested. We have not tried it, but the idea is to place the plate and slide in the box, close it, and carry it out of doors to be exposed to diffused skylight. Such a plan is perfectly feasible, once the correct exposure has been learned by experiment. But doubtless it will prove less easy than the use of the electric point.

*Lantern Slides* is a capital little book, by Mr. O. I. Yellott, published by the Photo Amer. Pub. Co., N. Y., at 50 cents.

# THE PENNSYLVANIA CONVENTION.

FIRST DAY.—APRIL 30.

THE Fifth Annual Convention of the Photographers' Association of Pennsylvania met at Reading, April 30th, under the leadership of President David Rosser, of Pittsburg. There was a goodly attendance of photographers at the opening meeting, which was called to order by the President, after which the Mayor of Reading offered the freedom of the city to the conventioners in a happy speech. Mr. Alfred Holden, of Philadelphia, responded to the Mayor's greeting, after which the President called upon Mr. Smith for an address. Mr. Smith said:

"I am glad to be here with the Pennsylvania photographers. Of course, there will be many more here to-morrow, as photographers rarely manage to get anywhere until the day after.

"The great question among photographers is: How is business? It is not necessary to ask you this question, for in this section business is good, and especially among the better class of photographers, who are getting in line with the ideas of to-day. They are doing a good business, and therefore have no reason of complaint. Go into any city in the United States, whether big or little, and you will find that the only people who complain that there is no living in photography are those who do poor work and ask poor prices for it. You can tell just what kind of a man a photographer is by the appearance of his place of business. Let me persuade you to keep up a good appearance, have the studio neat and prosperous looking, and bend all your energies toward the making of true photographs of your patrons. You will find that this is the line which leads to success.

"There is a very good example of this in this town. Mr. Goldman's studio, the one I refer to, is worth your going to see. It is a place where a lady can go without fear that her draperies or dress will be soiled. The photographer who expects to win the favor of the ladies should at least make sure that his place is in fit condition to receive a lady. You can hardly expect them to make themselves at home, or feel comfortable in a place which is untidy or lacking in cleanliness.

"I need not pursue this line further just now, but hope to talk upon it a little later in the Convention. If I can be of any use to you, or answer any questions upon practical photography, I hope that you will ask me. There have been questions asked about working royal bromide, and about this I will try to arrange to give you a demonstration afterward."

The President then called on Mr. Goldensky, of Philadelphia, and Mr. Griffin, of Wheeling, but they both declined.

Mr. Towles, of Cumberland, Md., made a few remarks, as follows:

"It is a pleasure to be here with you. I have attended two or three of these conventions, and each time I have gone home practically benefited, not only as a photographer, but also as a man. I have managed to leave my business to be here this time, not only for the pleasure of the trip, but because I think it is good business. I have pressed the Executive Board of your Association that some consideration shall be given to the question of joining with the photographers of Maryland, and I hope that you will not let the Convention pass without taking some action in the matter."

President Rosser said that with reference to the annexation of the sister States, he thought it to be a thing which the Executive Board could not act upon without changing the Constitution of the Association. I think that it is quite proper to bring the matter up at this meeting.

Mr. Betz, of Baltimore, was called on for an address, in the course of which he said:

"I arrived a few minutes ago, so that I am hardly in shape for much talking. I remember the pleasure I had in attending the Convention at Pittsburg, and I would like to lend my support to this proposed amalgamation or consolidation of the Association. I believe that we can make it a success. The Baltimore photographers have taken the matter up, and will be glad to meet any of the members of the Association as a Committee, or as a whole, to discuss the matter thoroughly, for the purpose of forming an organization for the

general welfare and benefit of the photographers of the East."

The President then asked if there were any other remarks on the subject, and if not a motion for adjournment would be in order. It was regularly moved and seconded that the meeting adjourn.

SECOND SESSION.—MAY 1st.

The President opened the session with his annual address, in the course of which he pointed out that the Association had made earnest endeavor to make the Convention educational. In his opinion, the pictorial exhibits were ahead of those of past years, and he expressed his pleasure in the marked improvement shown. He also spoke of the presence of Miss Sartain, of Philadelphia, a lecturer on art, and of the practical demonstrations on lighting and posing arranged for.

The minutes of the last year's Convention were then read by the Secretary, Mr. T. B. Clark, of Indiana.

The Secretary next read the resignation of Mr. W. E. Buehler, who left the Executive Board during the year to enter upon a course of studies for the medical profession.

Mr. Ross, of Chicago, announced that he would give a practical demonstration under the skylight at 2 o'clock in the afternoon; and Mr. Fell, of the Aristo Company, promised a demonstration of aristotype papers at 4 o'clock, after which the meeting adjourned to Mr. Goldman's studio.

THIRD SESSION.

After the opening of this session, Miss Harriet Sartain gave a lecture on art, in the course of which many pictures were projected on the screen to give practical application to her teaching. A digest of the lecture follows:

ART IN PHOTOGRAPHY.

When photography was in its infancy the production of a mere likeness was an event of great wonder and interest. As years passed photographers were content to display their perfect manipulation, and, although masters of their craft, had as little true artistic taste or appreciation as had, perhaps, the public to whom they catered.

Now, photography is an art. Men of cultivated taste have devoted themselves to its emancipation and have opened the way for others to follow. How much you have attained is answered with satisfaction by a glance around these walls.

The question which concerns all now is how to progress—how to develop and pass on to something stronger and better. I am here to help you if I can, from the painter's stand-point—over some of these difficulties in the limited time allotted me. I trust the few practical hints from the sister art that I can give will be of service.

Photographers in general, it seems to me, are in the same state as the artist, who, having acquired a certain skill in handling his material, is not yet fully trained to see beauties that he must see in order that he may express them. It is a common mistake to consider artists as fortunate beings who, having been born with a full appreciation of the beauties of nature, have nothing to do but to acquire facility in technical manipulation. On the contrary, the eye and the mind have both to be trained to see more than superficial charms, some respond more readily than others, but everyone has an innate sense of beauty susceptible of cultivation.

Turn your attention to nature, study the varying charms with which she manifests herself, and find out for yourself what it is constitutes that charm and enhances the impression, whether it is a flowing, graceful line, or a strong, forcible one, or if it is simply dependent on an expressive arrangement of light and shade.

But you will find it most necessary to supplement this with a study of great works of art, otherwise your eyes, unused to selection and rejection in nature, will be bewildered by the multiplicity of form.

Good composition in pictures is the result of long practice and continued study, though of course it must come primarily from nature, for, as Sir Joshua Reynolds said, "Rules are made from pictures, not pictures from rules."

Study will enable you to select and combine, to leave out or add, so that the general impression or character is made more marked or individual.

I object to iron-bound rules in art, but without the general principles which have been developed, and a study of the achieve-

ments of others, we should be in about the same position as were the earliest workers.

Doubtless, Giotto and Cimabue, if they had lived to-day, would have been as far in advance of their contemporaries as they were relatively beyond the archaic methods of the thirteenth century.

Dr. Johnson tells us clearly that "If no use is made of the labors of past ages the world must remain always in the infancy of knowledge."

Rubens, the exuberant master of the Flemish school of painting, acknowledged his indebtedness to Titian by his constantly reiterated advice to his pupils and to Valesquez, to go to Venice and study the works of that school. There is a great difference, however, between studying and copying the works of the master.

It should be used only as a suggestion for an expression of one's own individuality.

I shall confine my remarks most generally to portrait composition, single figures or groups, and we will consider it first in relation to line composition, distinct from the masses of light and shade.

The first consideration should be the general effect. This must be attractive, harmonious, and at the same time thoroughly characteristic of the subject. I cannot insist too strongly that the photographer should not lose sight of the individuality of the sitter in his search for an artistic effect. A portrait beautiful in itself may be utterly false to the character of the original. We see a lovely head, pensive in its attitude and expression, awakening within us tender and subdued sentiments, and find with a shock that the original is a vivacious girl, full of enthuthusiasm and spirit. Surely, such a picture cannot be tolerated as a portrait. It could be composed on lines more expressive of her character and still remain a charming work. [Slide here shown: Girl with the Muff.]

This portrait, by Mme. Vigei Le Brun, illustrates my meaning. She had for her subject a sparkling young actress of the Comedie Française. The portrait she painted is vivacious, full of movement and spirit. This quality may be exaggerated to the point of restlessness and wearying affectation, but this picture, owing to its simplicity, never tires; the face alone, although it is bright in its expression, would not be adequate to produce this result. It is the full, vigorous sweep of the lines of the figure which carry out the idea and make it such a charming portrait.

Take, in the first place, the lines of the skirt, which starting from the lower corner sweeps upward and toward the middle. They are firm and decided; there is no mistaking the onward movement, but that would not suffice if the line of the arm, thrust forward into the muff, did not repeat the line of direction with more decision and force, and we find it again varied in the lines of the hat.

So much tending to move the figure onward would prove a disagreeable strain if the face and neck were not turned to counterbalance it, so that the resultant effect is that of motion momentarily arrested.

One of the principles laid down by Sir Joshua Reynolds was that a picture composed of a single figure should be a complete composition in itself and not look as if cut out of a larger composition. His own portrait of Lord Heathfield, commander of the British at Gibraltar, forcibly illustrates the adequacy of one figure to completely and satisfactorily fill the canvas.

From the point of view of line composition, the figure is rigid, firm, solid, and therefore dignified, while the slight bend in the centre line of the figure, the almost imperceptible sway of torso and head counteracts a possible excess of ease. There is nothing forced in the position; it gives the impression of arrested movement, and we feel through the portrait the strength and nobility of the original. The slight sway of the figure would, perhaps, pass unnoticed if it were not emphasized and given energy by greater definition. The line of the coat, passing over the thigh and strongly relieved against the waistcoat, expresses in vigorous angles the more subtle movement of the body. The same line is repeated and given emphasis by the cannon which appear on the background, the hilt of the sword, and the key. The repetition of the principal line in other portions of the picture gives greater freedom as

well as having the effect of tying the composition together. The sense of ease, which contributes so much to the strength of this splendid picture, is very greatly increased by the slight deviation from the horizontal and perpendicular in the line of the head and shoulders.

Yet the painter of this masterpiece, when a novice, felt the shackles of tradition, like many another beginner. He was the first great master and original thinker in England. The painters before him were but servile copyists, merely repeating with dreary monotony what had come to be considered the proper arrangements. Men were painted with one hand tucked into the waistcoat, a most convenient method for putting it out of sight, and the hat was placed under the arm. It is told of Reynolds, by Northcote, that when young, little more than a student, he received an order to paint the portrait of a gentleman who wished to have his hat on his head. The picture was soon finished, but when submitted for the approval of the family, it was discovered that the man had two hats, one on his head, the other, as usual, under his arm.

A vital principle in art is that whatever the subject may be care must be taken that the attention is first directed to the point of chief interest. Failure to observe this principle will produce a confused and unattractive picture. It is the main lines and the broad effect of light and shade that do this. These tell from the distance, and if they are managed and disposed with skill the eye will be drawn irresistibly to the spot the artist wills it shall go. Otherwise, it wanders from point to point, becomes weary in its search for the centre of interest, and the effect of the picture is lost. There must be in a picture a predominant mass of light or of shadow and of form, a predominance of the mass of light over the dark or the reverse, or a broad dissemination of the half-tones with the extremes of the scale kept as accents, for unity is an integral, essential quality of art. Equality of interest produces hesitation and perplexity, while an agglomeration of little things do not make a great one.

A number of studio maxims to this end an artist learns to use instinctively; for instance, a figure, tree, or any prominent object must not be placed exactly in the middle of the canvas, although it may be made to appear so by the balancing of the composition. In the other direction, the horizon line must not divide the picture evenly. In the oldest landscapes the line between earth and sky was generally about a third from the bottom, but nowadays it is more often found near the top.

Greater freedom and irregularity in the masses are now permitted in composition, in contrast to which pictures composed strictly on the traditional old rules for angular and circular composition appear stiff and academic. There must be balance, for without balance there is no complete harmony; but if, as in this slide, a large mass of quiet forms occupies one side of the picture we find the balance perfectly restored by a small object strongly relieved against the most distant portion. This method of balancing is a favorite one among Japanese artists. [Slide.]

It is of the greatest importance also that the two sides of a picture should be united or tied together. In this slide the two figures and the long shadow thrown by them across the foreground unifies the composition. Take them away or curtail the narrow line of dark, and the composition will split in two.

This principle applies equally to both figure and landscape. [Slide.]

Even without much contrast of light and dark, lines alone may be made to suggest feeling or express sentiments of joy or sorrow.

In this whirling "Village Dance," by Rubens, notice how the lightness and rapidity of motion is given by the free circling lines of the arms and flowing drapery. The unending movement of those circling, swinging lines, their buoyancy, is the expression of unbridled joy. [Slide.]

Greater restraint, the more even flow of divine joy, is expressed in this exquisite picture, the "Marriage of St. Catharine," by Correggio; it is also an example of circular composition. All the lines and spots of light circle around and lure the eye toward the centre of interest, the hands giving and receiving the ring. The rapt, intent gaze of the figures themselves is fixed upon the

ring, helping to direct our eyes. It is a splendid example of concentration.

The Japanese have perhaps taught us more of the value of a line than any other nation. In some of their works a swinging line or a few decided strokes gives us the very essence of movement.

They tell a story of one of their artists who lay for many hours face downward over the side of a bridge to watch the swimming carp. At the end of that time he had but one line upon his paper, but that single line showed with marvellous truth the graceful movement of the fish.

The influence of one line opposed to another is one of vast importance. The graceful, flowing lines of drapery or figure can be greatly enhanced by the juxtaposition of perfectly straight ones, as they are in the "Vision of St. Helen," by Paolo Veronese, where the drooping, graceful curves of the relaxed body are given dignity as well as stability by the rigid vertical and horizontal lines of the window.

The vertical line always gives great dignity and majesty. We feel its effect in the splendid so-called religious banqueting scenes by the same master, where the gorgeous groups in the foreground harmonize and are at the same time relieved by large masses of architecture which give space and air. [Slide.]

In this Gerome, the "Death of Julius Cæsar," the architecture is again of great importance. It gives dignity and elevation to the scene as well as insisting upon the majesty of the subject. The introduction of the arch is a most necessary element to tie the two sides of the composition together. [Slide.]

A harmonious and characteristic background is always necessary for the completion of the idea. In this Raphael's fresco, known as the "School of Athens," the architectural background is of the greatest importance. It is thoroughly in harmony with the groups of philosophers and men of thought, and not only adds dignity and balance, but the spreading arches seem to afford space in which the mind may expand. [Slide.]

For the highest expression of dignity in portraiture we must turn to that superb picture by Sir Joshua Reynolds representing Mrs. Siddons as the "Tragic Muse." I doubt if a finer personification of tragedy could be conceived. See, in the first place, how the drapery, disposed in ample folds over the knee, contributes to the monumental character by spreading the base of the composition. The firm upright line of the arm, kept from being angular by the soft folds of the sleeve, insists upon the dignity of the figure, as does also the pose of the head and the neck. The slight turn of the head avoids stiffness and brings it more in harmony with the line of the other arm.

I regret to pass over this picture so quickly, even if it is but to study another expression of that master's genius. [Slide.]

This is a portrait of Lady Hamilton as a "Bacchante." This is essentially modern in its joyous vivacity of facial expression and youthful archness. The curving lines of the flowing locks suggest motion and harmonize with the turn of the body and line of the arm. It seems at first to have nothing but a succession of curving lines, flowing into or contrasting with one another, but we find a firm horizontal line giving direction to the arm and stability to the whole picture. It harmonizes also with the line of the low horizon.

This is but one of the many instances in which Sir Joshua Reynolds and others of the English school treated portraits as fancy pictures. Titled women were painted as "St. Cecilia," as "Juno Receiving the Girdle of Venus," as "Sacrificing to the Graces," etc. And who does not delight in that familiar picture known as the "Angel Choir," and, though admiring it as a picture, perhaps fail to realize that Sir Joshua painted it as a portrait of little Isabel Gordon, each angel's head being but another view of the same child.

And so we often find them painted holding a bird-cage, or pet dog, or lamb, or perhaps as "Little Samuel" or "Little Red Riding Hood," but always in a characteristic and beautiful manner, avoiding the stiffness of a stereotyped portrait.

Stiffness in the pose, as if the whole figure were petrified, is an element to be studiously avoided in portraiture; if the body is seen squarely from the front, the slightest turn of the head will, perhaps, suffice to give ease. But never, under any circumstances, when the chest is facing

you, turn the head away and bring the eyes back. They must always follow the direction of movement of the head. [Slide.]

In this splendid and vigorous portrait of "General Prim," by Regnailt, we find the energy and force of a martial portrait emphasized by the striking relief of the figure and horse against the background. The head in this is firm and square, facing us, but the abrupt angle of the shoulders expresses by contrasts the vigorous action of the figure.

In grouping several figures together there are added difficulties. Not only must the principles pertaining to single figures be considered, but there must be a general unity in the lines; there should also appear to be some kind of mental sympathy or interest. The earliest attempt at grouping in art progressed no further than the placing of two figures side by side. They were nearer to each other than to anything else; that was all. Artistically one would have looked quite as well if the other had been taken away. So did those ancient Egyptians cover their walls with unending lines of figures, telling the story of the king's deeds with accuracy, but never attempting the complications of the group.

At Phygalia and Athens, in the friezes of the great temples of the Greeks, there was a marvellous development. They were the first to bring grouping to perfection.

Perhaps the largest portrait groups ever attempted were those superb canvases of the Dutch guilds or societies of the seventeenth century, painted as at banquets or reunions. To study the best of these pictures, those by Rembrandt, Frans Hals, and Vander Helst, is the advice I would give those who cope with large groups. All the Dutch artists of this epoch were most successful in family portraits, too. A group of two or three figures is a less difficult problem, and a harmonious effect can be obtained in many different ways. In the portrait of herself and daughter, Mme. Le Brun embodies grace and charm in her usual delightful manner. A graceful flowing line sweeps from one figure to the other, and seems to establish a union of thought and sympathy as well as of line.

Nothing illustrates the rhythmic movement of line as well as the "Gleaners," by Millet. In those figures we have what might be termed a complete motion. One figure carries on the movement expressed by its neighbor and by the undulating lines thus established. They appear to be gracefully passing from one position to another, and the stiffness of pose is eliminated.

The election of officers came next, and the following board was elected for the ensuing year: President, Alfred Holden, of Philadelphia; First Vice-President, T. B. Clark, of Indiana; Second Vice-President, John D. Strunk; Secretary E. W. Brown; Treasurer, W. I. Goldman, of Reading. The new officers were presented to the Association, and promised to do their best during the year.

The President announced that Friday's business was a discussion on photographic copyright. He mentioned the desire on the part of many members to know more about photographic copyright, and expressed the hope that everybody would be present and give the matter their earnest attention. He said:

"I believe the copyright means a great deal to the photographer, and I think it means money for many of us. But we must have the law covering copyright made more equable and to give us a better degree of protection. There are many weaknesses in the present law, and these need adjustment, if necessary, by a new law. The Photographers' Copyright League has done much able work in this direction, and asks your support. It should be a matter of principle with photographers to give the League their indorsement and practical support in its work."

Mr. Giffin thereupon arose and said: "This copyright business is a matter well worthy of our consideration. There are a great many here who do not understand the real meaning or significance of photographic copyright. The majority of the photographers I have spoken to regard it as neither more nor less than a safeguard. It is more than that. It is, or should be, a direct means of revenue to the photographer. When we consider the universal use of photographs for the illustration of papers, and magazines, and books, it will be readily seen that photographers have in

the protection of their pictures by copyright a source of revenue which ought not be neglected. If a good picture is copyrighted it may be made to earn money for its maker, instead of lying useless on the shelves or being used without profit to the photographer. Many photographers are making good money the year round by taking advantage of their rights as provided by the Copyright Law, and what is good for one photographer is good for another."

Mr. Holden remarked that he hoped photographers would not put this copyright matter aside as something that was not of immediate importance. It behooved them to take up new matters when they were placed before them and not to wait until they themselves were personally interested. The object of the Association was to educate photographers along business as well as manipulative lines, and this copyright matter was a vital detail in the photographer's business.

The meeting then adjourned until Friday morning.

FOURTH SESSION.—MAY 2D.

The first business of this session was the choice of location for the next convention. After some discussion, Philadelphia was decided upon. The time of the meeting will be decided by the Executive Board.

Mr. Holden then addressed the meeting on photographic copyright as follows:

"MR. PRESIDENT, LADIES AND GENTLEMEN: Sometime ago I received a notice with an invitation to attend a meeting of the Copyright League at New York. At last year's meeting of the National Association the question of copyright was brought up, and to-day, I believe, they indorse the Copyright League. This question is one that has given the photographers for some time past considerable trouble. As you all know that at the present time the newspapers are being very largely illustrated and chiefly from photographers' originals, consequently I have thought it well to present before the Association the resolution worded in this way:

"Resolutions passed at the Convention of the Photographers' Association of Pennsylvania, Reading, Pa., May 1, 2, 3, 1901.

"WHEREAS, Photographs are now the larger means of illustrating the magazines and newspapers of the day, and are in general demand for all illustrative purposes; they are a source of profit to those using them in this way, and for these reasons they are valuable property to the photographer who creates and owns them; and,

"WHEREAS, Photographs are subjected by law to copyright; and,

"WHEREAS, The recent rulings of the United States Courts on the 'Found in Possession' clause (Sec. 4965) of the Copyright Statutes have made it impossible for the photographer to protect his property against wilful infringers of his legal rights; therefore, be it

"*Resolved*, That the Photographers' Association of Pennsylvania, in convention assembled, respectfully asks Congress to so amend the Copyright Statutes as to properly protect all copyrighted photographs; and be it further

"*Resolved*, That this Association indorse the work done in the past by the Photographers' Copyright League of America, and give it our cordial support in its effort to secure proper laws for the protection of the photographers' copyright; and be it further

"*Resolved*, That the Secretary be requested to prepare and formulate copies of these resolutions to Congress."

Moved and seconded that the resolution be adopted and read. So ordered.

Mr. Schriever then told of the experience he had with two or three pictures that he had copyrighted; also Mr. Holden, who is strongly in favor of the adjustment of the Copyright Law.

Mr. Sullivan told the experience he had with the picture of an old man who died a short time after the picture was taken. He was a well-known man, and the picture was a valuable one. It was not copyrighted, and therefore copies were made and sent broadcast over the country. Mr. Sullivan is heartily in favor of this action and hopes that it will be carried through.

Mr. Brown hoped that something would be accomplished in reference to this matter.

Mr. Holden moved that they select or appoint or elect a representative to the Copyright League. Also seconded. So ordered.

Mr. Schriever, of Scranton, made a few remarks, which were as follows:

"The Photographers' Association of Pennsylvania is now five years old, and I have attended every time since our first meeting at Harrisburg. We perhaps have made mistakes by holding our meetings at places which were not for the best advantage of some of our members, but nevertheless I feel there is something wanting for the increase of membership in this Association. For that reason I suggest that we invite some of our neighbor States to join us and make this a District Convention instead of a State Convention. By doing so we will add, perhaps, 100 photographers to our list.

"I move that the three States, Delaware, Maryland, and West Virginia be admitted into membership, and that a representative of the aforesaid States be allowed at the next meeting of the Board, the same to be selected by the incoming President of the Photographers' Association of Pennsylvania."

Mr. Goldensky delivered an address, as follows:

"This is a good move, ladies and gentlemen, if it is properly moved, but a very bad one if it is not conducted properly. I think it will be of some benefit in some ways, but in some respects hinder us. What we want is to keep the old members, and not constantly get new ones. As the Association is now, it chiefly benefits the little man. He comes here, sees new things, profits, becomes a middle-class man, and probably in the end, after a few years, a first-class man. Then he drops out. Every year we see new faces, and the old ones are not to be seen. Now, this should not be. We ought to do something to retain our old members. If our sister States join us, this means a great many more little men."

Mr. Holden then said he thought the matter should be settled for once and all at this meeting, and not let it hamper the Association any longer.

Mr. Towles, of Maryland, said that, as representative of Maryland, he would ask the Association of Pennsylvania to be annexed, but that he did not intend to get down on his knees and beg. He said that he was sure that the Association would be greatly benefited, and that they would do all in their power to aid it. Mr. Betz, of Baltimore, made a few remarks to the same effect.

Mr. Cummings, of Delaware, was then called on, and he said that he could guarantee that Wilmington, Delaware, would do its very best, and that the Association would never regret it if they would take Delaware in.

Mr. Giffin, of Wheeling, West Virginia, was then called on, but he said that he had talked enough on the matter and had nothing further to say.

Motion before the house that we admit Delaware, Maryland, and West Virginia, which was seconded. So ordered.

FIFTH SESSION.—MAY 3D.

The first business of the session was the announcement of the award, as follows:

The *Grand Prize* of the Association was awarded to Elias Goldensky, of Philadelphia, Pa., a silver loving cup.

*Special Class:* Mr. J. E. Giffin, Wheeling, W. Va., gold medal.

*Genre Class:* Miss Mary Carnell, bronze figure.

*Class A:* Elias Goldensky, Phila., gold medal; Miss Nymetz, Chester, silver medal.

*Class B:* Mr. Dexter, McKeesport, silver medal; E. E. Seavy, New Castle, bronze medal.

*Miniature Class:* Mr. Dexter, McKeesport, silver cup; Mr. Wildermuth, Wilkes-Barre, silver medal.

*Rating Class:* Mr. Bair, Emporium; Mr. Eyer, McDonald; Mr. Berger, Germantown; Mr. Johnson, Easton, bronze medal each.

*Commercial:* Jennings & Sawyer, Philadelphia, silver medal.

*Landscape:* Mr. Vuille, Huntingdon, silver medal.

The picture selected for Inter-state display was Mr. Elias Goldensky's.

Miss Harriet Sartain then addressed the meeting on "Light and Shade," as promised. The paper is published in full on another page of this issue. It is one of the most useful papers of the sort given at the conventions of the last few years, and contains many hints of directly practical value in everyday work.

## "HOW TO ENJOY PICTURES."

THE following review of Miss Emery's popular guide to the study and enjoyment of pictures is from the pen of Mr. H. C. Farrow, the art critic on the staff of the Worcester (Mass.) *Gazette*. It should stimulate the earnest photographer in his endeavor to appreciate good examples of art, and hence is worthy of a place in these pages.—ED. W. P. M.

"Through the courtesy of Edward L. Wilson, 287 Fourth Avenue, New York, we have received a book bearing the above title, and on sale by him for $1.50. It is gotten up in fine order—paper, type, illustrations and matter are in every way first-class. Because so attractive it will be bought and read, and will ever prove a first-class investment of money and time. It is a book for everybody, and ought to be a family possession. Nearly everybody enjoys pictures, and the fraction that does not, ought. This book will surely help them to an insight of the beauty and value of the pictorial art, and so to an appreciation of its worth.

"In this book there is no attempt to discuss theories of art, or outline different schools of painting, or criticise art books, or painters and their work. Art criticism finds no place in its filled pages. Judiciously it appendixes a list of the art books for study. There is no pretension to treat of great and original paintings that are inaccessible, but such only as can be had from photographs and the Perry or Brown series of prints. No one can become skilled in art and able to judge of art from simply studying photographs and prints. But one can gain a vast deal from such study. One can know the master paintings of the ages and their artists, and gain an intense love for art and a wide and accurate knowledge of it from picture study. We study pictures as we study books, not that we may pass learned criticisms upon them, but for the purpose of appropriating something from them and enjoying something in them.

"This book has surely the merit of helping us see pictures more intelligently than we could without it. The method here pursued is suggestive and helpful. It is not slavish or artificial. For instance, the author gives four pages of easy, delightful, and suggestive talk about Corot's 'Morning,' or 'The Dance of the Nymphs.' Nine of every ten readers of these four pages will always have larger ideas of that picture because of the description; the tenth knew it beforehand!

"We go to picture galleries to be acted upon—to become a recipient and so get additional enjoyment. To know how to enjoy a great picture is of itself a great art. Few know how to do it, even among connoisseurs. It makes mighty little difference to the great art world what you think of any special work of art. But how do you enjoy it, how does it affect you? The picture is the judge of your capacity, and not you of its excellence. Does it arrest your eye, stir your emotions, command your attention and draw you again and again to it? If so, to you it is a great picture.

"A boy saw a picture of a woman holding a child; it attracted him daily for a week; the proprietor noticed it and gave him a cheap print of it; he took it to his room, studied it by day and night, sketched it, colored it; not for years afterward did he know that it was Raphael's masterpiece, but it made him an artist and tinged the character of his art. The photographs and prints we get of great paintings are reproductions of reproductions, but in spite of it they still have tonic qualities left in them. Their pleasure-giving power may be but a small fraction of that possessed by the original work in a gallery three thousand miles away, but that measure of power is thoroughly enjoyed. 'A little learning' is not a dangerous thing. With most of us it is slight knowledge of art or none at all, but that little is a lifelong blessing. The fact is, the study of pictures is a source of rest and delight and inspiration, second to none within the reach of everyday people. Nature, books, and art have personal charms causing one to forget weariness and worries. They have their messages, and by the power of memory and imagination we can recall their truth and beauty and force before 'the inward eye which is the bliss of solitude.'

"William Morris Hunt used to urge his

pupils to study only the best pictures. In our schools we are impressing upon the child mind the very best samples of painting and architecture and sculpture. The boys and girls are collecting little art galleries of their own. They are coming to know the great master's work at sight. I stood looking in the window of Boutelle's art store the other day, and there came across a bit of a girl, who, poorly clad, stood beside me looking in, and unconsciously spoke out, 'Oh, there's Raphael's "Madonna!"' I asked her where she learned that. 'Our teacher tells us all about pictures, and shows us a lot of 'em.'

"This book, *How to Enjoy Pictures*, will prove a real blessing to the gallery where it enters. It will create a real and healthful interest in art by showing us how to look at pictures and how to read and study them. Pictures, like children, have an individual charm and character. He gets the most out of them who takes them for what they are.

"The last chapter is on 'Pictures in the School-room,' by Stella Skinner, and I am sure it will be read by every teacher and parent with zest and lots of it. The book, though sometime published, is still new to many, and to such who have not seen or read it we urge its reading." Sent post-free to any address for $1.50.

## THE VALUE OF FRATERNITY.*

BY WILLIAM EDWARD WARD.

JUST at the present time the profession needs no argument advanced to convince it of the advisability of a larger measure of open intercourse. The strong attack which has just been made on it by outside advertising enterprise has awakened it, as it has never before been awakened, to the need of a strong, united front. It is, perhaps, almost to be hoped that the victory that is now being striven for will not be too easily gained, for the harder won the fight the more will it weld photographers together. One of the proposals in regard to the Professional Photographers' Association is that it will include a number of separate and local lodges or chapels. These will, presumably, hold their own little local meetings and discuss things of interest to the craft. In this meeting an interchange of opinion is in my humble opinion one of the most hopeful auguries for the future.

It is curious how thoroughly fraternity has become almost an unconscious religion with the American photographer. And it is almost pathetic to think of those who preached to deaf ears through many weary, exciting years. A few earnest men were busy, forty years ago, fighting the claims of the "process-monger." This special species of fraud was in the early days of photography more rampant in America than in England. Ingenious rascals would sell working rights for processes which were not covered by any valid patent, but which were the common property of all. A few "stalwarts," foremost amongst whom were Dr. Wilson and Mr. Jex Bardwell—at that time men full of youth and enthusiasm—conducted cyclone campaigns against the fraudulent, and more than once smashed claims which appeared likely to drain thousands of pounds from the profession; for the mongers were not easily intimidated, and the leaders of professional rights were more than once in danger of common mundane arrest and trial for libel or some other equally vague and unsatisfactory crime.

It was this wholesale attempted blackmail which was one of the causes that led the old Professional Association to success. As the strong stimulus failed, through the discomfiture of the mongers, so did the profession grow careless and their association fall on evil times. At length not only the association, but—what cut much more nearly—the individual photographer began to feel the ground grow insecure, and to save himself from disaster he again woke to

* This is from a series of articles contributed by Mr. Ward to the *British Journal of Photography*. Although written for British photographers, it is so interesting, as based upon Mr. Ward's experiences among the professional workers on this side of the Atlantic, that we feel sure our readers will appreciate its points.—ED. W. P. M.

the cause of his fellow-worker and himself.

Just two years ago there was a picture exhibited at the Professional Convention in America, and it created a furore.* Many photographers were showing choice examples of their work, and the creator of this special picture, with a fine sense of the fitness of things, hung one picture only, in the centre of his generous appropriation of space. The picture had thus the best possible chance of attracting notice, and it was in itself a wonderfully beautiful piece of work. It was a profile head of a young girl in a style and costume very strongly suggesting those steel engravings of our late Queen, published about sixty years ago. Now, a new and very effective system of lighting a beautiful woman in low evening dress is naturally of great interest to the profession, and there was much speculation as to this picture. The photographer was written to, asking if he would describe his method for the benefit of the fraternity. He at once responded by publishing full particulars in the leading professional magazine of America, and after fully describing his procedure, he concluded: "The style has brought me much new business. Try it." He evidently did not fear "the other man," and as a result many wide-awake men have displayed a new and very attractive style in their show-cases.

The various conventions held in America are worthy of a special article. An interesting move has just been inaugurated by the professional photographers in Indiana. It is rather an exclusive affair, this "Photographic Art League," being confined to twenty members and strictly to professional workers. One original and commendable feature is that twenty towns must be represented. This precludes any possibility of the largest city—which has, I believe, several able men in it—dominating the smaller ones. The twentieth man will come from some pretty small town. The obligations are slight but real. Twice a year the photographers will dine together, and each member is pledged to bring or send at least three examples of his work to each meeting. Papers may be read, the pictures will be discussed and criticised, and good-fellowship will it is hoped be cultivated. This semi-annual meeting will cause nineteen of the photographers to travel, and some of them may have to go more than two hundred miles. But they will meet their brother-workers, they will have a useful interchange of ideas, and they will have a "personally conducted" inspection of sixty photographs—produced within the last few months—by the most wide-awake and successful of their neighbors. Concerted effort of this kind can have but one trend, that of the widening and elevating of professional photography.

The same idea, carried out on a much wider scope, has taken firm hold in Boston. Boston, a city of over one million people, is a great place; and like all the truly great is capable of harboring a delusion—for it considers itself the hub of the universe. However that may be, Boston, which seldom advertises its photographic existence in national circles, has good professional photographers—not one but many—men who understand art as well as photography, and who know, too, the art of success from a business stand-point.

Just six months ago a few Bostonians organized a club which they termed the "Lens and Brush Club." With a delightful touch of American freedom and capacity for getting at the main point, this club has either not burdened itself with a string of rules, listed under Roman numerals, or it has forgotten to make such list accessible to the public or its members.

Nine persons were in at the birth, and they included some of the most advanced and artistic workers in New England, as Captain John Smith named that part of the country which is now divided into half-a-dozen States around Boston. Mr. W. H. Partridge was chosen first President, about which more anon. When the club was seven weeks old it had a membership of fifty—"photographers, artists, critics, and lovers of the beautiful"—a membership gathered from the best men in New England. When the inevitable dinner was held, forty-five of the fifty members were present—signs of a healthy virility—and they entertained almost as many guests. In February of this year they held an annual meeting, fixed a limit of member-

* The portrait by Mr. C. C. Kough, given as frontispiece in this MAGAZINE, January, 1900.

ship at two hundred, and have now reached that limit. The club has some original ideas; one is worth quoting, for it holds that special attention should be given to photographic technique and the development of a thorough understanding of pictures before any attempt at production is made by the members. It is a pity that so laudable a rule has not a wider application. The meetings of the club are devoted to an hour's talk on practical photography and to criticising pictures produced by the members, and pictures criticised are reproduced under the added suggestions of the critics and again brought forward—a novel feature which is at once helpful and practical. The club won't have anything to do with prizes or medals, considering that its members can receive sufficient honor in the approval of their fellows. The club is at present arranging for permanent quarters, where doubtless the inevitable salon will be held, and where many educational features will be available. Although so eminently professional in its aims and actions, and in its inception entirely composed of professionals, it now includes in its ranks many leading amateurs.

I refer to Mr. W. H. Partridge. Now, Mr. Partridge is a bad man—a very bad man—for, although undoubtedly an able and "artistic" photographer, he actually is not ashamed to make pictures which *sell*. He does quite a publishing business in those absurd little pictures of juvenile impossibilities which so delight the hearts of many women folk. He will dress a child in a most incongruous combination of wooden spade, and bucket, and garland of fig-leaves; or the juvenile, divested of this accessory, will sprawl in fat creases on a continuous background of seashore, stretching away to a high horizon of storm-tipped waves. And yet, in spite of this sad bowing down to Mammon, his fellow-workers decided that he was a man to honor. However, I suppose that even an artistic photographer may be allowed to be a sensible man.

These are two specific examples—many might be quoted; for in ways innumerable the American photographer rubs shoulders with his fellow, or finds out what he is doing. There is a very effective accessory used on this side by William Gill; probably by others. It is the idea of using a window at which the "sitter" stands as though looking out, and, if cleverly handled, is most effective. The same thing has been done in America by H. H. Pierce, one of the best-known workers of the new school. In several ways this special idea has by Pierce been made known to others in the fraternity. He has, I believe, shown it at various professional exhibitions; when he calls on his fellow, it doubtless is included in the portfolio or parcel which he carries; and he has allowed it to be reproduced in the illustrated magazines. As a result of this publicity the idea is being used in other studios where wide-awake men are on the lookout for some new thing with which to enrich their show-cases.

The man who is wide-awake and progressive is the friend, not the enemy, of his brother professional. There seems to be an old fogy notion that the "patronage" accorded to the photographer is something like a cake, where if one gets a bite too much another gets a bite too little. The hard fact is that the progressive man creates *new* business. Photography is the better, and not the worst, because Barnett has opened in London, or because Hollyer devotes a part of his time to portraiture. The man who fraternizes and learns will not only help his fellow; he will also help himself to the practical advantage of more work and better prices.

---

*Novel Treatment of Short Exposures.* At a recent meeting of the Photographic Society of Philadelphia, Mr. John Bartlett narrated how he had occasion to make a photograph of a horse at short notice and late in the day. He exposed two plates, giving them two and three seconds respectively. The first was developed and yielded no image at all. He developed the second with metol and got a thin negative, with very little contrast. Upon this he used ammonium persulphate and a little sulphuric acid. After the high lights had been reduced he washed the plate, and then, without placing it in the hypo, intensified it with mercury. The result was almost equal to a well-timed plate.

# THE CAPITAL CAMERA CLUB EXHIBITION, WASHINGTON, D. C.

THE Tenth Annual Exhibition of the Capital Camera Club marks a decided advance over the former interesting exhibitions of this prosperous club, and the recognition which it has received from artists and the art-loving public is an evidence that efforts to produce photographic work of the better class are always appreciated by the public, among whom the camera workers have many stanch friends.

For several years the annual exhibition has been held at the rooms of the club, in the centre of the business section of the city. The rooms, while centrally located, are poorly adapted for exhibition purposes. The Tenth Annual Exhibition was held at the Hemicycle Hall of the Corcoran Art Gallery. This hall was designed for an exhibition room, and it is used annually for exhibitions by the Society of Artists, the Water Color Society and the students of the Corcoran School of Art.

This is the first instance where the Hemicycle Hall has been occupied by a photographic exhibition, and the question of the place of photography in art has been settled so far as Washington is concerned by the granting of the use of this beautiful exhibition-room by the trustees of the Corcoran Art Gallery, as well as by the verdict of the art-loving public, who have attended the exhibition and who have been unanimous in saying that the photographic exhibition is there by right, not by sufferance.

The pictures admitted to the exhibition were carefully selected by a jury composed of Mr. James Henry Moser, Mr. H. Hobart Nicholas, Mr. Richard N. Brooke, Miss Mathilde Mueden and Mr. Thomas W. Smillie. Mr. Moser, painter and art critic, acted as chairman of the committee. Mr. Nicholas, Mr. Brooke and Miss Mueden are well-known artists of the city, while Mr. Smillie is equally well known to the photographic public as the photographer and curator of photographic research of the National Museum.

The standard of excellence required for admission was high and yet not prohibitive. Pictures were required to show earnestness of purpose and evidence of an art feeling; pictures having artistic qualities were not barred by a lack of technical excellence, nor were pictures showing artistic excellence excluded because they were also good technically. The *result* was the standard adopted, the *means* a secondary consideration.

The pictures were divided by the art jury into three classes, Class Special containing twenty-five of the pictures selected on account of their superior artistic merit. They were hung in the centre of the Hemicycle, and their hanging was directed by the jury of selection.

The remaining pictures were divided into two classes, A and B, Class A containing the best work, after the selection of Class Special; Class B contained work less meritorious than Class A, but in all the classes the rule that a motive should be manifest was adhered to.

Referring to the catalogue we find that Class Special contained twenty-five pictures, Class A ninety pictures and Class B 154 pictures. Leaving Class Special we find that the pictures of each exhibitor are hung together, and that the numbers of the frames are arranged consecutively, a plan which other exhibitions can follow with profit.

The framing this year was in good taste, and but few instances of a desire to outshine by the grandeur of the frame were noted; in fact some pictures were rejected because the framing was not in harmony with the print, and the exhibitor was advised that the prints if properly framed would be admitted, but this was oftener the case where the pictures were extravagantly framed than otherwise.

Referring to the individual exhibits, we note a very well-composed winter picture by W. S. Adams, and following along the line we find a charming genre study by M. Louise Anderson, entitled "A Pink Tea." Dr. Joseph W. Anderson is represented by six pictures, of which his study, "Adoration," a mother bending over the cradle of her child, seems to me the best of all.

Wallace C. Babcock, the President of

the club, exhibits seven pictures, of which his picture "Irma" is one of the notable portraits in the exhibition. Miss Anna S. Brooke exhibits five pictures, four of which are landscapes showing good selection, with high pictorial value. Miss Julia Bullock exhibits three pictures, and has, in addition to the number, two in Class Special. Her work is serious in endeavor and her ideals are unquestionably high.

Miss Estella Collins exhibits nine pictures in Classes A and B, and has one, "The Sacred Song," in Class Special. "The Sacred Song" seemed to me to be somewhat lacking in the technical excellence which is manifest in her other work, and the sentiment would have been equally strong if more deference had been shown to proper lighting.

Miss Kate S. Curry is represented by twelve pictures, one of which was admitted to Class Special. This exhibitor is at her best in portrait work and escapes the conventional and portrays the natural in a manner that is both charming and dignified.

Mr. W. S. Davenport exhibits but two pictures, but as they are considered good enough by the jury to go in Class A, his average is of course very high.

Edward J. Daw has eleven pictures in the exhibition, of which two are in Class Special and seven in Class A. Mr. Daw's work is full of promise. His landscapes are well composed; his "Moonrise on Chincoteague Island" is a rare effect in photography, and the sense of darkness giving way to the light of the moon is feelingly expressed.

Dr. W. E. Dieffenderfer has one of the largest representations in the exhibition, twenty-three pictures, of which ten were admitted to Class A. His work shows a wide field of subjects, embracing portrait, genre, still-life, landscape and interiors. The picture which pleased me the most, however, is his No. 99, "The Latest Magazine," which is one of the most original conceptions in the exhibition. The model is seated at a table reading a magazine. The lighting of the picture apparently came from the shaded lamp, the background is so judiciously treated and the whole interest centred about the figure, that it hardly seems possible that such "painter-like qualities" are the work of the camera.

J. W. L. Dillman exhibits seven pictures, of which his "Daybreak" is undoubtedly far the best.

Frank Haines exhibits four pictures, and his "Bobtail Flush," in Class Special, is one of the pronounced hits of the exhibition. The picture presents four little girls, white and fair, sitting in a row, intently gazing at a tiny negro child at the end, who seems disconcerted at the scrutiny and doubtful whether it is best to laugh or to cry. The picture is good in line, well treated, and tells its story plainly.

Dr. Wm. P. Herbst, chairman of the Exhibition Committee, exhibits eight pictures, two of which are given in Class Special and three in Class A. The work of this exhibitor is always interesting, but always serious, if not approaching the sombre in its tendency.

J. Marshall Little, to whose painstaking efforts we are indebted for the artistic catalogue, exhibits four pictures, of which one is given a place in Class Special.

One of the most striking pictures in Class Special is the "Daisy Field," by John A. Massie. In composition it is all that can be desired, in the rendition of light and shade it leaves the feeling that there is much room for improvement, as the brilliancy of the print seems too strongly manifest.

The honor place in Class Special is given, and worthily so, to Miss Estelle G. Mozart's "Autumn is Here," a picture of a cornfield with the corn in the shook and that delightful sense of Indian summer that brings to mind "When the frost is on the pumpkin and the corn is in the shook." The whole picture suggests the fine feeling shown in some of the better studies of A. Horsley Hinton, and Miss Mozart is to be congratulated in this successful interpretation of autumn.

The work of W. F. Peabody is represented by six examples in Class Special, eleven in Class A and nine in Class B. Mr. Peabody is a tireless worker, and the genius of hard work is shown in this exhibition. He is evidently at his best in landscape work, while his portraits leave but little chance for suggestion of improvement. Indeed, if Mr. Peabody, Mr. Daw, and

Miss Curry should conclude to enter the professional field there would be an entire change in professional methods, or a new portrait photography would take the most prominent place.

Mr. F. S. Pierce is represented by four pictures, one in Class Special, two in Class A, and one in Class B. His work is extremely well done and bears evidence of careful thought.

Dr. F. M. Seebold exhibits nine pictures, one of which is included in Class A. The works show careful attention to the technical rather than to the art side of the subject.

H. P. Simpson exhibits five pictures. His "Trees Like Sentinels by the Water's Edge" is unusually good and reminds one of English landscape workers.

E. B. Thompson has eight prints, five of which are in Class A. His work (particularly his carbon studies, in which he divided honors with Miss Collins) is full of interest and good in execution.

Walter D. Wilcox exhibits ten pictures, one in Class Special and seven in Class A. A high average is maintained in all, and his subjects, mostly from Puerto Rico, Honolulu, and the Canadian Rockies, are well chosen and handled with a skill that denotes a belief in doing everything well.

Mr. Charles W. Hadley is represented by two pictures in Class Special, four in Class A, and five in Class B. Mr. Hadley includes in his work many studies of Chinese and Chinese life, well posed and pleasantly presented.

Miss Helen E. Williams exhibits six pictures, four of which are included in Class A. Her work is all creditable and, with that of the other women exhibitors, shows a high average in artistic lines.

The tendency of the exhibition is toward portrait work, stimulated no doubt by the fact that the club owns one of the best studios in the city.

The tendency to original ideas in portrait making is encouraging, and from the impetus afforded by the large attendance, equalling that of some of the art exhibitions, the favorable criticisms from artists and art critics, there is a decidedly bright future in store for the organization, and the public have the right to expect much better things in time to come.

CHARLES E. FAIRMAN.

# EDITOR'S TABLE.

THE Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, state that they have placed on the market their developing cartridges in glass-tube packing. This new packing has the advantage over the old cartridge form (paper-cover) that bursting is entirely avoided, which previously often was the case, because of the hydroscopic quality of the chemicals to draw moisture from the atmosphere. The contents of these tubes keep indefinitely and are for use, simply to be dissolved in five to seven ounces of water. The tubes are very practical, and especially to be recommended to amateurs and others on a journey.

We are also advised that the Agfa-Intensifier is now put up in two-ounce bottles, at 35 cents, to meet the demand for this specialty from those whose practice calls only for small quantities at a time.

---

THE last issue of the *Photo-Pivot*, published for free distribution by RALPH J. GOLSEN, Chicago, is devoted to photographic outfits and special bargains for the summer season. Some very attractive offers are included in the *Photo-Pivot's* pages, and economical buyers should write for a copy.

THE Photographers' Association of Oklahoma and Indian Territory will hold their second annual convention at Oklahoma City, October 1st and 2d. Preparations are making for a useful meeting, and photographers from outside States will be cordially welcomed. Mr. W. E. BROOKS, Norman, Okla., is the Secretary of the Association, and his official announcement runs as follows:

"DEAR SIR: This is to call your attention to the fact that the new and wonderful country known as 'Oklahoma and Indian Territory' has, among its other remarkable and unexpected achievements, developed a photographers' association. This was not accomplished by any of the patent compound developers now in the market, which are said to develop anything from a lantern-slide to a case of blood-poisoning, but by the combined action of the photographers, who gathered themselves together in a bunch and agreed to associate, and so it was. We can scarcely claim to be fully developed as yet, but we are accumulating 'deposits of silver' as fast as we can, and believe when we are thoroughly 'fixed' we will be able to make quite a good impression."

SECOND CHICAGO SALON.—The Chicago Society of Amateur Photographers has decided to hold its second Salon in the galleries of the Chicago Art Institute from October 1st to 22d. The purpose of this Salon is to bring together the best examples of the photographic work of the year, rigidly to be selected by a competent jury of photographers and artists. Particulars may be had shortly by addressing the Executive Committee of Chicago Photographic Salon, the Art Institute, Chicago.

DR. F. DETLEFSEN,
Chairman,
F. DUNDAS TODD,
W. B. DYER,
LOUIS A. LAMB,
Committee on Publicity.

We commend this exhibition to the attention of our readers, and hope that the Salon will not lack good examples of the best professional work of the year.

---

MR. G. GENNERT, 24 East 13th St, New York, informs us that he has undertaken the American agency for HOECHEIMER'S Gum bichromate Papers, and will be glad to send circulars of information to those who desire them. HOECHEIMER'S papers are well and favorably known in Europe, and their introduction here should further popularize the gum-bichromate printing method. Mr. GENNERT has already in stock a supply of the following colors: Engraving black, warm black, gray, and sepia. The paper is ready for use after sensitizing, which is a very simple matter. Sample packages, containing 9 sheets, 10 x 12 inches, of the four colors mentioned, may be had for $4.00.

---

THE first annual convention of the Kentucky and Tennessee Photographers' Association met at Nashville, Tenn., in April, and had an unusually successful gathering for a first meeting. President J. H. DOERR, of Louisville, presided, and over one hundred photographers supported him. The convention of 1902 is to meet at Louisville.

---

MR. LOUIS F. JANSEN, 33 Holland Place, Buffalo, N. Y., writes us that he can offer accommodations to a few photographers visiting the Pan-American Exposition As the provision made for visitors to Buffalo this summer is likely to prove inadequate so far as comfort is concerned, Mr. JANSEN'S offer should not be overlooked.

---

THE Eastman Building, the gift of Mr. GEORGE EASTMAN to the Mechanics' Institute, Rochester, N. Y., was opened with appropriate ceremonies on April 15th last. After the formal opening the building was given over to a series of public entertainments, covering six days, so that the people of Rochester might have abundant opportunity to make themselves familiar with the building and its splendid work. We learn that the affair was a grand success, all classes co-operating to express their appreciation of Mr. EASTMAN'S generosity.

---

OUR old friend Mr. C. W. MOTES, who, after many years as a photographer in Atlanta, Ga., retired from active business about two years ago, has equipped a fine studio at his home at Athens, Ga., and is again behind the camera. Mr. MOTES is a master in his profession, and his new beginning will interest his many friends.

---

MR. OTTO BORJÉ, after an extended European trip, has returned to San Francisco, where he will shortly open a studio for high-class portraiture.

---

MR. G. CRAMER and Mr. H. HYATT, of St. Louis, recently made a flying visit to the Illinois College of Photography, at Effingham, Ill., and declared themselves surprised and pleased with the arrangements there provided for practical instruction in photography.

---

THE June issue of the *Aristo Eagle*, Jamestown, N. Y., contains a few reproductions of choice examples of portraiture by Mr. J. ED. RÖSCH, of St. Louis, with an excellent portrait of Mr. RÖSCH.

---

THE Missouri Photographers' Association will meet at Pertle Springs, Mo., September 10th, 11th, and 12th. It has been decided to abandon the giving of prizes at this convention, in which Missouri falls into line with the New England and National Associations. Secretary J. G. STONE, of Warrensburg, Mo., will gladly send full information to those asking for it.

---

THE M. A. SEED DRY PLATE CO., of St. Louis, Mo., announces new orthochromatic plates for portrait and landscape photography, made in medium and rapid speeds. Full information may be had on application to the St. Louis or New York offices.

---

*The Photo-Miniature* for May discusses "Telephotography" in its usual simple and practical way. The application of the telephoto lens to large direct portraiture, mentioned in this issue of *The Photo-Miniature*, is a modification of studio practice about which all professionals should be informed.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of the **patented**

# Agfa=Intensifier.

**Name protected.**

***The One Solution Intensifier.***

**Agfa-Intensifier is a clear, colorless solution, which for use is diluted 1 part with 9 parts of water. In this the negative to be intensified is immersed, and intensification commences immediately, continuing for about 10—15 minutes, when the process is complete and the plate must be withdrawn to avoid veiling.**

**Agfa-Intensifier does not stain, and the whole process is absolutely complete in the one manipulation; it only remains to wash the negative.** Of all Dealers.

| 2 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $0.35 | 0.60 | 1.00 | 1.75 |

**Testimonials.**

**Mr. Jacob Schloss, New York,** writes: Gentlemen: I have tried your **"Agfa" Strengthener** and find it works splendidly, far better than the old time Mercury and Ammonia or Soda, and shall continue it.

**Mr. F. W. Guerin, St. Louis, Mo.,** writes as follows: Gentlemen: Replying to yours of 12th inst., the **Intensifier** is all right. I had been using the intensifier some time before you sent me that sample.

---

# Agfa=Reducer.

**Name protected. Patented.**

**"A novel and simple process of Reduction for Plates, Slides, or Bromide Papers."**

**"Always ready for use, and instantly prepared."**

**Only to be dissolved in 10 parts of water.**

**Complete reduction takes about five minutes.**

Of all Dealers.

$0.80 per original bottle of 4 oz. with **screw lid and hollow glass stopper, serving as measure.**

$1.00 per box of ten glass tubes containing ten grammes each.

Eikonogen. ✱ Amidol.

Rodinal. ✱ Diogen.

IMOGEN.

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

**Manufacturers of**

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

LIBRARY

PRICE, 30 CENTS

Vol. XXXVIII. ✣ ✣ ✣ No. 535

JULY, 1901

FA 6615.545

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.

PHOTOGRAPHIC PORTRAITURE AS AN ART. By J. C. Strauss . . . 233
DIRECT ENLARGEMENTS IN WARM TONES . . . 234
A PHOTOGRAPHER'S GOSSIP. By Robert Melville . . . 237
THE PROFESSIONAL PHOTOGRAPHERS' ASSOCIATION OF ENGLAND . . . 239
METHODS OF INTENSIFICATION AND REDUCTION. By C. H. Bothamley . . . 240
BUSINESS METHODS. By E. D. Bronson . . . 245
A FEW HINTS ON POSING MEN. By John A. Tennant . . . 247
THE NEW STRAUSS STUDIO . . . 249
THE SITTER. By A Professional Photographer . . . 256
PORTRAITURE. By Harold Baker . . . 257
THE PHOTOGRAPH AND ITS MOUNT. By J. Horace McFarland . . . 261
PLATES FOR OUTDOOR WORK . . . 263
PHILADELPHIA PHOTOGRAPHIC SALON, 1901 . . . 264
THE EDUCATIONAL CONVENTION AT DETROIT, August 6th to 9th Inclusive . . . 265
BROMIDE AND OTHER PAPERS . . . 267
BACKING PLATES. By Jex Bardwell . . . 269
INTERIOR PHOTOGRAPHY . . . 270
PHOTOGRAPHERS' ASSOCIATION OF THE PACIFIC NORTHWEST . . . 272
THE NEBRASKA CONVENTION, Lincoln, May 21 to 24, 1901 . . . 273
NEW ACCESSORIES. By Wilbur Grubeman . . . 274
PERMANENCY. By Paul Clare . . . 275
PROPOSED METHODS OF PHOTOGRAPHING THE SUN'S CORONA . . . 277

OUR PICTURES:

Mrs. James Brown Potter. From a Portrait by Langfier, New York.
A Portrait, by Arthur Hewitt, Orange, N. J.
Views In and About the New Strauss Studio, St. Louis.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N Y POST OFFICE AS SECOND CLASS MATTER.

The monthly edition of *WILSON'S PHOTOGRAPHIC MAGAZINE* has been *increased three times* since the year began. January, February, March and April numbers are out of print. These facts speak for themselves. Professional photographers realize that WILSON'S MAGAZINE is a trade journal that helps; that gives useful and timely information concerning things of interest to the craft; practical articles, formulae and methods; and instructive illustrations showing what American photographers are doing.

WILSON'S MAGAZINE is an independent journal for the practical worker; has no stock house or "influence" behind it, no "axe to grind." It gives all the news and is helpful, as well as interesting from cover to cover. Every photographer should see it every month. Send in your subscription to-day. Three dollars for 12 months. One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON

PUBLISHER

287 Fourth Ave., New York

MRS. JAMES BROWN POTTER
By Langfier, New York

# [illegible]

# [illegible]

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. JULY, 1901. No. 535.

## PHOTOGRAPHIC PORTRAITURE AS AN ART.

BY J. C. STRAUSS.

As I understand it, the purpose and scope of portrait photography as an art is to approach nearer and nearer the work of recognized masters in portraiture. The worker with a camera, however, is at a personal disadvantage, as compared with the painter, by reason of the fact that the latter is, to a greater or less degree, acquainted with his subject, and there is ample opportunity, while sittings are in progress, for friendly, unrestrained companionship. Through this intimacy of association the artist acquires a fair knowledge of the mental make-up and characteristic traits of his sitter, and is thus enabled to put the latter's individuality on the canvas.

On the other hand, the photographer, even one of the better class, in most instances, has probably never before met his patron, and to that extent is handicapped in his endeavors to put character and soul into his portrait.

With the photographer the sitting lasts only a portion of an hour, and a part of this time is, of necessity, devoted to arranging of apparatus. If the rapidity with which a sitter can be disposed of—rushed into the "operating" room, put into "poses" with the head securely clamped in a "rest" (?), asked to "look pleasant," and excused from further attention by a vociferous "next!"—if this method of rapid handling of subjects were the one employed by all photographers, their process of portraiture would never advance beyond the purely mechanical.

Portraiture by photography is now claiming recognition as an art, because a few of those in the craft have had the courage to say:

"I will not permit my name to go on factory work. I will not allow myself to be transformed into a machine in which rapidity of action is the only consideration. I will aim to obtain results which will command approval from those who are competent to judge artistic productions. If, in order to accomplish this purpose, I must limit my daily sittings to three instead of thirty, this shall be done. I must have time to give each subject proper attention. I want my work to bring out the individuality of the sitter. There must be soul, as well as features, in the face."

In order that the principles underlying artistic portraiture may have opportunity for expression by photographic methods, it has become essential for a man who endeavors to create productions having art merit, and who strives for quality rather than quantity, to devote more time to each subject. By this I do not mean to say that the actual time employed in making of negatives should necessarily be increased, but that the time devoted by the photographer to becoming acquainted with his patron should be greater. The purpose of this is obvious; it allows an opportunity for learning the salient points of character and utilizing this knowledge toward obtaining a portrait not only good as to feature-likeness, but strikingly natural in portrayal of characteristics.

It must be admitted that photographers are largely to blame for the small demand for artistic merit in their productions. For years they have taught the public that the

correct thing in portraits was a white, shining face, without a trace of the bone formation. The most important employé of the "gallery" was the "retoucher," who, without any correct knowledge of the anatomy of the "human form divine," chiselled the negative until the resulting photograph portrayed a being out of all resemblance to the "image of his Maker."

The boon companion of the retoucher who produced smooth faces was the artist who believed that the face should be as white as the collar, shirt front, or protruding corner of handkerchief.

The photo-factor knew all about chemical effects in his print, which made the stitches in the buttonhole of a man's coat "to part and stand out like quills upon the fretful porcupine."

It is difficult in a year or two to offset the effect upon the public of the practices of a couple of decades. It will probably take some time yet until patrons unlearn the teachings that photographs white in color and defrauded of character by excessive retouching, with prominence of detail, are not only untrue in fact, but wholly lacking in art qualities.

Among those who strive for the higher possibilities in camera portraiture the retoucher's importance has vanished, and his work has been made secondary. It takes many years of life to produce the lines of character in the human face, and these should not be eliminated to suit the whims of a barbarian whose ideal is the face of a chinaware doll.

Comparative color-values is a subject of much thought and conscientious study. A mere contrast of harsh lights and shadows is meaningless, and no more resembles the living subject than do the crude drawings of the aborigines. An exaggerated regard for details in the unessentials of a picture will be replaced by proper suggestion, in accord with nature. To sum up: a portrait by photography, just as one in oil, should have feeling and warmth and character. And in the last year there has been a great advance, a wonderful progress toward the truthfully artistic and artistically truthful in photographic portraiture. The work now being done by those few photographers who realize the errors of the past as compared with that of a few years ago, shows the same degree of improvement that there was from the tintype to the photograph of recent times.

That this forward movement will continue is guaranteed by both the works and the faith of the recognized leaders in our craft.—*The Art Review, St. Louis, Mo.*

## DIRECT ENLARGEMENTS IN WARM TONES.

THE convenience of working by artificial light, and the many improvements in the manufacture of silver bromide paper have played an important part in the process of silver bromide enlargements. However technically perfect and in itself satisfactory the resulting picture may be, there is always something wanting, which at the time appears very desirable, and that is a true so-called photographic tone, such as is peculiar to a printed-out-picture.

In order to do away with this disadvantage, it has long been recommended to use the uranium and sulphur toning processes according to the Eastman formulæ.

I can by no means speak well of either. The uranium process is very uncertain, and in a moment a good picture can be totally ruined; while the sulphur toning is certain death to any silver picture, though the change is not so quickly perceptible in pictures with a brown tone. Moreover, the brown tones produced are not sufficiently pleasant to lay claim to being the photographic tone, and do not fulfil the necessary conditions satisfactorily.

The question therefore arises: Is there no method of procuring pleasant warm tones in direct enlargements? And we can quite confidently reply: Certainly there is such a method, and we have no need to give up using emulsion papers.

Long before silver bromide gelatine came into practical use there was a gelatine enlargement paper which contained chloride of silver instead of bromide of silver. This paper is in general not so sensitive to light as the silver bromide gelatine paper, still with suitable preparation its sensitiveness may be considered as

high. It has further the pleasing property that if, as would be necessary for obtaining a black picture, it be longer exposed and a dilute developer used, a faultless picture with a warm tone, similar to that produced by gold toning, is obtained. By this means it is possible by a direct process to obtain a picture which, as regards tone, cannot be distinguished from a printed-out picture, but which possesses many advantages over a picture produced with the help of an enlarged negative.

Up to now there have been difficulties in the way of the practical use of this process, mainly due to the defects of the most generally used light source, but now these difficulties may be considered as overcome.

Till lately the light from an oil lamp was exclusively used for silver bromide enlarging. The result of this was that it could not be used for silver chloride paper, because the time of exposure was so extraordinarily long that pictures made from negatives which were not soft easily became hard. It was therefore necessary, especially when pictures with warm tones were desired to work by daylight; daylight is, however, so irregular in quality that, in using gelatino-bromide papers it has been completely supplanted by even the poorest of artificial light sources.

To-day, when we have in acetylene light an extraordinarily actinic, evenly working light source, it is certainly appropriate to draw attention to the advantage of gelatino-chloride paper for special enlargement purposes. In fact, when it is considered how much stronger acetylene light is than that given by oil, the conclusion is easily arrived at that when using a highly-sensitive gelatino-chloride paper and a thin negative the time of exposure is a minor detail. To explain this, we must examine the circumstances somewhat more fully.

Optical brightness and chemical intensity are acknowledged as two different things. One optical light may be much brighter than another, yet be far behind in chemical energy. Therefore only those data which have reference to chemical action are of any importance to us. According to Walmsley, who has made a special study of the different light sources for microphotography, the chemical action of acetylene light is so great that (in special cases) it surpasses daylight and takes about three-quarters of the time of direct sunlight. With such unusual energy, and by using the new, extraordinarily powerful anastigmatic lenses, it will be possible to make such a substantial reduction in the time of exposure that it need not exceed that necessary with the light from an oil lamp and a lens well stopped down when using gelatino-bromide.

It is a mistaken idea to think that ten times the length of exposure should be necessary for the production of warm tones as for black tones; four times is much nearer the mark for gold-toned tones, if a suitable developer be used, in which class the tartaric acid developer must, of course, not be included. For pleasing blue tones double the time necessary for black tones will sometimes suffice.

It cannot be denied that with reference to the conditions of the enlarging process when gelatino-chloride paper is used, one is still somewhat limited as regards time; that is, it is not well to exceed four or five times. That can, however, vary greatly if a more sensitive paper be successfully prepared, which appears to be by no means an impossibility, as can easily be observed with transparency plates. It matters nothing, moreover, whether gelatino-chloride-bromide paper be used instead of gelatino-chloride, the principal thing is that with the increased sensitiveness warmer tones, similar to those produced by gold toning, can be obtained.

Warmer tones can, however, also be produced on ordinary silver bromide paper without using either uranium nitrate or sulphur.

If, for instance, silver bromide paper be given considerably more than normal exposure, and then treated with a developer which contains, instead of the usual potassium bromide as restrainer, potassium chloride, the silver precipitate, under the influence of the chloride, changes from black into brown, as is the case when platinum prints are treated with a developer to which chloride of mercury has been added. In this way it is possible, without anything further, to obtain pleasing sepia tones by means of simple development only. The ferrous-oxalate developer is the only one to be considered here,

and the following formula is to be recommended:

SOLUTION I.

| | |
|---|---|
| Water | 1 litre. |
| Potassium oxalate | 330 gms. |

SOLUTION II.

| | |
|---|---|
| Water | 1 litre. |
| Potassium chloride | 130 gms. |

SOLUTION III.

| | |
|---|---|
| Water | 500 c.cm. |
| Ferrous sulphate | 24 gms. |
| Citric acid | 2 " |
| Potassium bromide | 2 " |

For use take of

| | |
|---|---|
| Solution I | 20 parts. |
| " II | 5 " |
| " III | 5 " |

By using more of Solution II, browner tones may be produced, but the exposure must be longer in accordance therewith.

A backward change of the color of the silver precipitate from black to a light tone appears theoretically quite easy, and it is also practically possible, but the results are not all that might be desired, and the process is therefore little used, especially as it is very troublesome in any case. On the other hand, the property possessed by the reduced silver of attracting and retaining other finely distributed bodies has been lately applied for toning purposes, and is similar to the uranium toning, though permitting greater modifications.

Chloride of copper in combination with potassium ferricyanide, if it comes in contact with a picture in metallic silver, causes a precipitate of a reddish color. This precipitate is, however, not very solid, and as during the process the silver is slightly attacked, the picture must become reduced. But by using cuprous oxalate, which is easily soluble in potassium oxalate, the conditions are altogether different; the precipitate obtained is sufficiently solid and the picture is not reduced. This bath works very slowly, however, therefore it is necessary to add ammonia, which expedites the toning.

Dr. Eder has lately greatly improved the toning method, originally introduced by Namias, by adding chlorate of copper, and has published a very practicable method of using this toning process.

The toning bath is prepared by dissolving in a litre of water 5 grammes of sulphate of copper and adding a sufficient quantity of a saturated solution of carbonate of ammonia to redissolve the light blue carbonate of copper precipitate. A solution of 12 grammes potassium ferricyanide in 700 c.cm. of water is then added. If a precipitate should again form powdered carbonate of ammonia must be added until the precipitate redissolves into a clear, dark-blue liquid.

The print treated with this bath first assumes a warm brown tone, similar to that produced by the uranium process. This tone becomes warmer and warmer, and appears finally to be cherry-red. If the red print be treated with a weak mixture of water and ammonia the tone changes into a reddish-violet, while the use of the bath, consisting of one part sulphuric acid to 500 parts water will produce an almost brick-red tone. A reddish-brown tone may be obtained by washing the red print well and treating it with a solution of chloride of iron.

One advantage of this method of toning is that the solution is less poisonous than the uranium bath, and also after toning the prints may be thoroughly washed without any harm. The light genuine coloring will not only withstand a lengthy washing, but will also be so attacked by neither alkalies nor by acids as to cause a perceptible weakening. The order of the tones is such that first the brown ones and later the red ones appear, and by modification by means of the above-named weak baths any suitable tone may be obtained.

If, therefore, bluish pictures, similar in tone to those produced on English platinum paper with cold development are desired, Bühler recommends the method of fixing with an alum-hypo fixing bath containing gold. It is possible with it, when using Bühler's specially suitable silver-bromide paper and an amidol developer (in my opinion other developers mostly give too dark tones), to obtain decided blue-black tones, which are much more effective than the monotonous gray-black.

But, as a rule, enlargements of a considerable size are much better in black than in a warmer so-called sepia tone. This is specially the case where a great deal of retouching is required. This can be done artistically and smoothly on rough

paper by using a good drawing-pencil, and is not difficult even for the inexperienced; while to retouch sepia pictures, which can only be done successfully with suitable colors, one must be very skilled. When it is at all possible the original negative should not be used, but a transparency should first be made, a suitable character given to it, and after very careful retouching a faultless new negative be made for the special purpose in view.—*Das Atelier des Photographen.*

## A PHOTOGRAPHER'S GOSSIP.

BY ROBERT MELVILLE.

WE were "chinning" together, the photographer and I. He had just been investing in some new accessories, and I had called round to see them.

I found him pondering over a rather pretty picture which he was about to hang in his reception-room, and for which he was choosing a frame from his stock. Happy man; he had a reception-room—or rather a waiting-room, such as most photographers would give much to possess. The reception-room proper, the business part, was a mere small store about 18 x 12 feet, with a counter, a desk, a couple of chairs, and half a dozen pictures on the wall. But from this four broad shallow steps led to a large room, 18 x 30 feet, lofty, and lighted by three large windows on the north side. The walls were papered with a dark maroon paper, which was, he told me, very cheap, and which was certainly very effective. The whole key of the room was dark, and yet it seemed as cheerful a room to spend an hour in as anyone could desire. The walls were hung—not crowded—with framed photographs, ranging in size from 5 x 7 upward, and smaller photographs stood on the three little tables and on the mantel over the ornamental fireplace. "Yes," he said, "I find this a very successful room. It is entirely in charge of my reception-room lady, and she takes great pride in it. All the smaller photographs which stand on the tables are especially intended for our customers to handle—for the average person loves to finger a thing. They are all attached to easels, or fastened in little frames in such a way that the picture itself will not be touched, and the frames are selected with a special view not to show finger-marks. At the worst it is a matter of sponging a little mark from glass. I used to favor the old-fashioned album, to which people sat down and turned the pages. But it got so filthy—no other word could describe it—that I soon discarded it. Then I tried using several tables and scattering mounted photographs carelessly over them, but I found that the mounts gradually accumulated dirt, and even with frequent changing seldom looked well. And what was worse, people did not seem to care about turning them over, and the room often looked quite forlorn with people idling about in it while waiting for friends. So I hit on the present plan, which ensures every picture being kept clean and acceptable, and also keeps every picture plainly in view with a minimum of labor; for if anyone picks up one of the smaller pictures they naturally return it to the space waiting for it—they cannot pile up frames and easels as they can plain mounts."

I did not see a single carte mount—my friend is neither a fashionable nor a high-priced photographer. "No," he said, "not one sitter in ten orders a carte. There is a theory that the public demands certain styles, and so fashions grow. I rather think we lead the public, not the public us. Five years ago I did almost as many cartes as cabinets, and I stopped it by simply discontinuing to exhibit them. A customer comes and is shown the work—cabinets. Prices are quoted, and if the sitter asks for 'the smaller pictures,' of course they can be supplied. But the way in which such a simple omission has changed my receipts has been a revelation to me. Another thing that I think is a great mistake is to exhibit mounted unframed prints. People see all the pictures neatly framed, and it gives them a better impression. They pick up one of the smaller ones and admire the whole thing; the frame sets off the pic-

tures in their eyes and tempts them. No; there is no after dissatisfaction. When the prints are received by the customer merely mounted the portrait is the centre of attraction, for a portrait of one's self is a very different matter from that of a mere unknown somebody displayed as a sample of a photographer's wares."

I looked again at the pictures, and noted that quite a little care had been devoted to them. But it doubtless paid, and as my friend said some of his best pictures had been hung on the wall for several years, with occasional changes of position. But such were dainty pictures, of the kind that were not spoiled by an out-of-date fashion, but which are pleasing at any time.

Storing negatives is in his eyes a simple matter, and done in the simple, satisfactory way adopted, I believe, by most photographers. Every negative taken is marked with the name of the person scratched on the film. When the order is executed and the negative ready to be filed away it is given a number. The name of the person is entered in an index-book under the initial. One line across the double page is used for each name, with address, number, and style of negative. A new index-book is used each year, and it is only a matter of a few minutes to run through all the M's or H's for ten years past. The negatives themselves are packed away in batches of ten in empty plate boxes, the numbers contained marked boldly on the ends of the boxes and the boxes stood on edge, in consecutive order, on a shelf. For a small business there is only one fault to find, and that not the fault of the system. However much they are watched, assistants *will*, unfortunately, be careless; and when they take a negative from stock may return it to the wrong box, which opens endless possibilities of trouble.

"Proofs? I know you will say I am all wrong, but I often send out unfixed and sometimes untouched proofs. But usually I retouch one or two negatives for a dozen order. The retouching has diminished very much in amount during the past five or six years. I cannot quite understand why, but ladies really seem to prefer a platinotype print to the best of glossy papers — and so aristo-platino is much worked by me. I have made it a part of my business to know as many people as possible, and so do not worry about any fixed system of proofs. And the same may be said of charges. I run a great many accounts, and seldom lose money. A new customer usually pays on the first call to the studio—in fact, I always treat a newcomer as a 'transient,' one who just happens to call, and may never give me another sitting. And in such a case cash with order is the only reasonable course."

We climbed from the show-room to the studio, passing at the top of the stairs the little dressing-rooms and the plate-changing room. Accessories galore were littered around, eight or ten backgrounds were standing in an Anthony holder, and others were on stretchers or piled in a corner. "You see," he said, smiling, "I prefer the Falk method, and like to have my accessories around me." Certainly, he had a sufficiency of them, and knew how to make effective use of them. His light was small for the size of the studio (not that the size should have much to do with it), but it was sufficient and northerly. It was a single slant, but not of the usual kind. There was no sidelight, but merely a part of the roof glazed. The wall was nine feet high, and on the top of the wall the glass commenced. It is good to come across an enthusiast, and here was one indeed when he touched the subject of his light. Too much flood of light he declares to be a mistake of the best modern photography. As a man moves into a new studio, so does he find that his work loses that indefinable softness that is one of its great charms. So light within three feet of the floor is as bad as to use a mere horizontal toplight. And when photographers discard the old sash they err grievously. The cutting off of a part of the light is quite an effete consideration in these days of rapidity. But a good deep sash is invaluable to *soften* the light. There is all the light required from overhead, but the more diagonal the light is the more it is intercepted by the depth of the sash, and the more is the softness and gradation of the whole. And in the soft lighting of my friend's work he certainly shows the results which many a photographer would be only too glad to obtain, whether by excess of sash or by any other means.

The photographer has run a bar of iron diagonally across one corner of the studio, and on this he has hung five or six pieces of tapestry. He does not believe in a plain background—except occasionally. Two or three of these tapestries are very glowingly colored, but not to add to their effect in a picture, rather to catch the eye as a customer enters the studio. These are being used in portraits of women, usually ladies in house dresses or demi-toilettes, and standing. The pictures are trimmed rather long and narrow, panel shaped, and seem to be a catching line.

"You seem to favor the 'old' school of photography," I said. "Do you really think it pays to put so much care into your work?"

"Certainly I do," he replied; "but," he added, "all the same, I most commonly find that when I produce an unusually pretty thing it is not appreciated, and a good likeness and 'the usual thing' seem to be most admired."

## THE PROFESSIONAL PHOTOGRAPHERS' ASSOCIATION OF ENGLAND.

THIS association, whose birth we chronicled in May, has now got down to business to the extent of electing a working committee, of formulating a policy, and of commencing an active drumming of the country for members. As a happy augury it is said that the special cause, the final straw of outside competition, which brought about the forming of the association, has already been removed. We sincerely trust this is so, and would point out that if those firms who roused the ire of the profession by offering photographs as premiums have really withdrawn their schemes at this early date, it is more through an act of courtesy on their part than through any pressure which may as yet have been brought to bear.

In fact, they may be safely regarded as solid benefactors, if their action has made union among photographers a fact. It should not be forgotten either that in all probability the whole suggestion of such premiums was made and put through by some firm of "trade" photographers, and that it is primarily due to action *within* the photographic camp that the obnoxious plans were ever matured.

Whatever the inwardness of the move, however, the happy result has been such that our English brethren will have only themselves to blame if they now fall back into the slough of disunion and anarchy in which, if their own reports are to be believed, they have been so long.

The London committee which has been formed is very catholic in its composition and includes the names of such well-known men as Harold Baker, H. Walter Barnett, Alfred Ellis, Frederick Hollyer, and William Grove. A formidable set of rules has been formulated, setting forth among other things that membership will be confined to master photographers, and that a nominal payment of $1.25 annually shall make a photographer subject to all privileges and liable to all the rules. It would seem that specific arrangements have not been made for the many local bodies which are supposed to be germinating in various centres of the country; doubtless they will gradually evolve and be taken care of as the time comes. Whether the membership of the association will become healthily large is problematical. We gather that between two and three hundred promises of membership were made before the formation of the association. Now that it is a fact, this membership should very much increase. Every photographer whose name can be obtained from the directories has been circularized, and this general advice is to be followed up by personal canvass by enthusiasts among their local opponents. We say opponents advisedly, for in the past the British photographer has been all too eager to view "the other man" as an interloper, if not worse; and any movement of intercourse among local men is, to people understanding the English field, eloquent indication of the serious state of affairs.

The photographers are wise in their day and generation. Our confrère of *The British Journal of Photography*, Mr. Thomas Bedding, has been the organizer and engineer of the association, and the

latter insist that he is too valuable to be allowed to consider his share of the active work as finished, and have appointed him chairman of the association. Mr. Bedding is a man not given to unconsidered statements, and assures us that there is every indication that the association will be carried to a complete success.

# THE NEWER METHODS OF INTENSIFICATION AND REDUCTION.*

BY C. H. BOTHAMLEY.

I PROPOSE to bring before the society in this paper certain interesting new and partially new methods for effecting the two somewhat troublesome processes of intensification and reduction.

Members of this society are well aware that with the exception of the process which is based on the use of uranium compounds, all of our older methods of intensification are based on the use of compounds of mercury or compounds of copper in the most highly oxidized condition in which these compounds exist. A solution of a haloid mercuric or cupric salt is applied to the negative or positive image, as the case may be, and the intensification depends upon the reducing action of the metallic silver upon these salts, producing in the one case a mercurious compound and in the other case a cuprous compound, which afterward may be treated in such a way as to reduce that mercurious compound still further into metallic mercury, the mercury remaining and forming an addition to the silver which was present before.

The two newer methods of intensification, one devised by Messrs. Lumière and the other by the Actien Gesellschaft für Anilin Fabrikation in Berlin, resemble the old methods in being based upon this particular property of mercuric compounds in their relation to metallic silver. The Lumière method is a modification and only a modification of the well-known Edwards process, while what is commercially known as the Agfa method presents rather more novelty in that a mercuric compound is used which, so far as I know, was not used before for this particular purpose.

### AGFA INTENSIFIER.

The Agfa intensifier is a liquid which consists of mercuric sulphocyanide dissolved in a strong solution of an alkali sulphocyanide. [The presence of a mercuric salt and of a sulphocyanide in the Agfa intensifier was demonstrated by the usual tests.]

When this solution is applied to an ordinary photographic image, whether negative or positive, a compound of mercury is deposited on the image, and I have found by actual analysis that this compound contains sulphocyanogen and mercury in the mercurous state. Presumably it is mercurous sulphocyanide. The deposition of this mercurous sulphocyanide increases the apparent opacity and also somewhat changes the color of the image, with the result that there is likewise an increase in the printing opacity.

The solution as it comes into the market is merely diluted with nine times its volume of water, and the negative, previously well washed, is immersed in it. The image gradually increases in opacity and the change is easily watched. When the desired intensification has been reached the plate simply requires thorough washing. The first lantern-slide is a strip negative, one-half being intensified in this way, while the other is unintensified, and it will be seen that the degree of intensification is considerable.

It is not necessary to treat this intensified image any further; so far as I have been able to ascertain the deposit is permanent. When exposed to direct sunlight for several days it undergoes a slight change

* A paper read before the Royal Photographic Society, London, in January. Although somewhat lengthy, this paper contains much practical information concerning photographic helps recently introduced in American practice, and our readers will doubtless be glad to have it at hand for reference.—ED. W. P. M.

in that it darkens somewhat in color, but it does not fade in any way, and the alteration in printing value is trifling, if, indeed, there is any at all. Sometimes, if the negative or positive is allowed to remain too long in the intensifier (from twelve to fifteen minutes is the ordinary time) the image becomes more or less bleached, and if that should happen it is necessary to wash very thoroughly and treat with any ordinary developer.

The next slide shows two halves of the same strip negative, both treated with the Agfa intensifier, and the one left without any further treatment, while the other was treated with a developer. One is a gray-black image and the other a somewhat brown image, but if they are compared by taking prints from them on any ordinary printing-out paper, the difference is very slight indeed, and such slight advantage as there is is in favor of the developed image.

This intensifier, then, gives a considerable degree of intensification of, as far as I can ascertain, a stable kind, and moreover it shows, as far as my observations go, no tendency to produce stains, assuming that reasonable care has been taken to wash the negatives after fixing. It is applicable not only to negatives but also to positives, and the slides shown illustrate the kind of effect that is got by intensifying lantern slides in this way—a distinct increase in opacity and a slight change of color toward brown.

### LUMIÈRE'S MERCURIC IODIDE.

The Lumière method of intensification is based on the use of mercuric iodide and is a modification of the well-known Edwards process of intensifying. In the Edwards method, you will remember, the mercuric iodide is dissolved in ordinary hypo. It is a method of intensification characterized by its freedom from stain by the very considerable degree of intensification which is obtained, but also unfortunately, in many cases at least, by the fact that the intensification is not permanent. The difference between the Lumière method and the Edwards method is that in the former sodium sulphite replaces the sodium thiosulphate of the earlier process, and we have in the Lumière intensifier a solution of mercuric iodide in a very strong solution of sodium sulphite—one part of red mercuric iodide being dissolved in 100 parts of a 10 per cent. solution of the anhydrous sulphite, equal to 20 per cent. of the ordinary crystallized sulphite. The intensifier can be readily prepared by simply dissolving precipitated and washed mercuric iodide in sodium sulphite solution of that strength. It is put on the market in the form of a solid substance which from its appearance is merely a mixture of mercuric iodide with the proper proportion of sodium sulphite, and merely requires to be dissolved in water. When the solution is applied to an ordinary photographic image in silver there is production of mercurous iodide; I have by direct analysis found that the intensified image at this stage contains iodide and mercury in the mercurous condition. There is a considerable degree of intensification without any further treatment, but in order to secure that permanence which has hitherto generally been supposed to be wanting in the mercuric iodide method, Messrs. Lumière treat the intensified image with any ordinary developer. This reduces the iodides in the image to the metallic state, and the result is a high degree of intensification, as you will see from the examples shown. Further, the next slide shows that it is possible to repeat the process. Both halves were treated with mercuric iodide followed by ordinary development; then one-half was treated a second time in the same way, and it can readily be seen that the repetition of the process gives a distinctly increased intensification.

The next slide shows the application of the method to a lantern slide which was too thin to put into the lantern with an ordinary blow-through jet. After one intensification in this way it is dense enough even for the electric arc. The next slide shows the application of the intensifier to a line subject; the black is very strong and the contrasts are greatly improved.

### POINTS IN MANIPULATION.

With regard to the working of this particular intensifier, the first point to be observed is that the careless or hurried man who does not wash out all the salts of

his fixing bath from his negative has not, in this case, to pay the penalty of his misdeeds by getting stains. The mercuric iodide dissolved in sodium sulphite is not precipitated in any way by hypo (thiosulphate). The stage in the process where stains may be produced is during the final treatment with the developer, but I have intensified several negatives in this way, and I have never found any tendency to stain, if reasonable care be taken to wash out the intensifier before treatment with the developer.

It is important to keep in mind that the mercuric iodide and sodium sulphite solution must be kept in the dark when not being used, otherwise there is reduction of the mercuric iodide and a precipitate forms, the strength of the solution of course becoming less. In making up the solution I have found that it is advisable not to heat the water, because a very moderate rise of temperature sets up a reduction of the same kind as is produced by the action of light, and a certain amount of gray precipitate is formed. As you saw from the examples, it is possible by this method to effect a very considerable degree of intensification, and as the result of my own experience I may say that I should not hesitate to apply the method to any negative, however valuable, which I wished to intensify.

### REDUCERS.

The old methods of reducing gelatino-bromide negatives were based upon the action of a ferric salt, generally ferric chloride, on the image, the silver being converted into silver chloride, which had to be dissolved away afterward; and although that method was capable of giving good results, still it was uncertain and lacking in power of control, because it was extremely difficult to see how far the reduction had gone, or rather how far the action on the silver had gone, until the partially bleached image was put into the fixing bath, and then of course it was too late to remedy any error that had been made.

In order to get over that Belitzski introduced the use of ferric oxalate in place of ferric chloride, dissolving the oxalate with sodium sulphite and hypo. That reducer has been somewhat largely used, but the introduction of a different and very convenient reducer, commonly known as the Howard Farmer reducer, in which a mixture of potassium ferricyanide and hypo is employed, led to the abandonment of the iron methods in actual practice. It is of course well known that in the Howard Farmer method what happens is that the ferricyanide acts upon the silver image and converts it into a compound, presumably silver ferricyanide, which will dissolve in the hypo.

### AGFA REDUCER.

Now, the first of these newer methods of reduction is based upon the use of ferric compounds in direct association with hypo; that is, sodium thiosulphate, so that the action of the ferric salt upon the silver image and the dissolving away of the compounds formed go on simultaneously and the process can readily be watched. This method again is a result of the activity of the Actien Gesellschaft für Anilin Fabrication, and the substance is known as the Agfa reducer. It is a ferric compound associated with sodium thiosulphate in the anhydrous condition, and comes into the market as a yellowish powder, put up in a particularly convenient form. It has to be dissolved in water, and the process of solution is interesting because when the substance comes in contact with water the first thing that happens is that the anhydrous sodium thiosulphate takes up a quantity of water and becomes converted into the hydrated form, and if you throw the Agfa reducer in water in a mass it sets very much as plaster sets and for the same kind of reason. If you want it to dissolve readily you must have the water swirling round as you let the solid substance trickle into it. It is quite easy to demonstrate the presence of hypo in the solution by the ordinary method of adding an acid and getting a precipitate of sulphur (experiment shown). It is not quite so easy to demonstrate the presence of the iron, probably owing to the existence of some double salt. Add to some of the solution the ordinary test for iron, potassium ferricyanide, and there is practically no reaction beyond a slight change of color, but on adding a drop of acid the usual dark blue precipitate forms immediately.

MANIPULATION.

When using this reducer the solid substance is dissolved in about ten times its weight of water and applied to the well-washed negative. Reduction proceeds slowly but very steadily, and when it has gone far enough the negative is simply washed. It has the advantage of the old methods of using ferric salts, that, while fairly rapid, there is only one operation and the process may be watched. You will see from the example shown that it has acted upon all the sections of the strip negatives, including those where the amount of silver was smallest as well as those where the amount of silver was high. I have not made optical measurements of the opacities of the strips, but I have printed reduced and unreduced strips side by side; and there is no marked change in the character of the negative, that is to say, the reduced negative is thinner and prints in less time, but it is not easy to detect any difference between the two prints.

AMMONIUM PERSULPHATE.

Latterly methods of reduction have been introduced which differ entirely from the older methods. I think I am right in saying that the first substance of this kind was the now well-known ammonium persulphate, a white crystalline salt which dissolves in water, forming, as a rule, an acid solution. When ammonium persulphate acts upon finely divided silver, the silver is dissolved in the form of sulphate, and of course the image is reduced. Now, what is supposed to be the characteristic point about ammonium persulphate is that it acts to a relatively greater extent upon the denser parts of the image and acts to a comparatively small extent on the parts where there is very little silver. That would appear to be clearly proved by the series of measurements which Dr. Eder published some little time ago in his long memoir on sensitometry, but the occurrence of that peculiar mode of action has been denied. It has lately been stated that the ammonium persulphate does not act as a reducer if it is in an alkaline condition. This statement is of interest not only from a practical point of view, but also from a chemical point of view, because if the ammonium persulphate does not act as a reducer in an alkaline solution I think one would have to give up the simplest and most probable explanation of its mode of action. The obvious explanation (but not necessarily the right one) is that the ammonium persulphate simply acts upon the finely divided metal and converts it into silver sulphate, which is dissolved, while at the same time the persulphate is reduced to ordinary ammonium sulphate.

The next slide shows the effect of ammonium persulphate on strip negatives, and I think they leave no room for doubt that the ammonium persulphate has, as it were, picked out and dissolved the greater part of the reduced silver of the more opaque strips, still leaving undissolved a large proportion of the comparatively small amount of silver which was in the thinnest strip. I have observed that kind of action frequently, and, without being in a position to express it in numbers, I think there can be no question about the general tendency of the ammonium persulphate to level down the whole of the gradations in the negative.

The next slide shows the effect of a solution of ammonium persulphate made alkaline with ammonia, so that, in fact, it smelt distinctly of the ammonia. In view of this result it is not possible to attach much importance to the statement that ammonium persulphate in an alkaline solution does not dissolve silver. You will see that practically the whole negative has been levelled down to the opacity of the thinnest of the original deposits, the action being of the same character as with the ordinary acid solution of the salt, although it takes a longer time.

The peculiar effect of the ammonium persulphate is probably due to the rate of the reaction being largely influenced by the mass of silver present at any given point and to the production of local elevations of temperature at those points where the mass is greatest, these differences of temperature helping to accentuate the difference in the rate of action.

CERIUM REDUCER.

The other reducing agents which have been introduced recently belong to a dis-

tinct type. It is probably well known to you that dilute sulphuric acid does not dissolve metallic silver, nor does it dissolve copper or mercury. The explanation lies in the fact that the conversion of the metal into sulphate by the action of sulphuric acid involves not only the combination of the metal with the sulphuric acid radicle, but it involves also the splitting off of the hydrogen from that radicle, and under ordinary circumstances silver, mercury, or copper is not dissolved by the dilute acid, but if there is introduced into the same solution some substance which will assist the process by combining with the hydrogen of the sulphuric acid, while the acid radicle of the sulphuric acid combines with the metal, so that there is a sort of simultaneous stress on the two proximate constituents of the acid, if one may use the expression, then the change takes place. This particular type of reducer, therefore, depends upon sulphuric acid and an oxidizing agent. It is not difficult to show that finely divided silver is not dissolved by the dilute sulphuric acid, but is somewhat rapidly dissolved if we add to the same solution a little potassium permanganate or a little of the sulphate of cerium peroxide, which is a salt of cerium in a highly oxidized condition. The simplest oxidizing agent to suggest in this connection is, of course, hydrogen peroxide. I have made experiments with hydrogen peroxide and also with sodium peroxide, but I have not found that the method has any practical value; the action is comparatively slow and the solution rapidly decomposes. Whether we start with hydrogen peroxide or with sodium peroxide, and add to it the dilute sulphuric acid, the solution contains hydrogen peroxide, and in contact with the finely divided silver, this hydrogen peroxide decomposes with increased rapidity. In the first place it is not possible to obtain a very strong solution, and in the second place the strongest solution that can be obtained very rapidly alters and becomes weaker.

The conditions are very different if we employ a comparatively stable, but at the same time highly oxidized compound like potassium permanganate or sulphate of cerium peroxide, substances which contain a considerable amount of "available" oxygen—that is, oxygen which they will part with to other substances that will combine with it, but at the same time are not liable to that inconveniently hurried decomposition which characterizes hydrogen peroxide.

The use of sulphate of cerium peroxide is due to Messrs. Lumière, and the use of potassium permanganate to Professor Namias.

The cerium reducer stock solution contains 10 per cent. of the cerium salt, together with a little sulphuric acid, and for general purposes it is diluted, immediately before use, with nine times its volume of water. It may, however, be used stronger than this for negatives where great reduction is needed, while for bromide prints it should be used weaker. When reduction has gone far enough the plate or print is thoroughly washed.

The next slide is a strip negative treated with this acid solution of the sulphate of cerium peroxide. It is easily seen that there is a tendency to attack the thinner deposits somewhat rapidly, a tendency which is characteristic of the ferricyanide reducer rather than of the ammonium persulphate reducer.

The reduction proceeds gradually, and there does not seem to be the same risk of uneven action or of stains as there is with ammonium persulphate, and the opinion that I have formed of this process is that it is a simple, readily watched, and in general quite satisfactory process of reduction, applicable to negatives, lantern slides, and bromide prints.

### POTASSIUM PERMANGANATE.

With potassium permanganate, on the contrary, the results in my hand have been very much less satisfactory. Ammonium persulphate and the solution of the ceric compound appear to have very little action upon gelatine, and I may point out here that in these acid methods of reducing you have to make considerable demands on the durability of the gelatine film, and I question very much whether, say ten years ago, these acid methods of reduction could have been applied to a gelatino-bromide negative without very marked and serious frilling taking place. Latterly, with most brands of plates frilling has become much

less common, and whatever may be the processes of manufacture adopted to diminish the tendency to frill, they are the processes which have made it possible to use these acid methods of reducing. But that is merely by the way. Ammonium persulphate and the cerium compound act but little on the gelatine; in fact, as far as I have been able to see the cerium compound does not act on the gelatine at all, but with the potassium permanganate it is quite otherwise. The usual solution contains potassium permanganate, 1 part; sulphuric acid, 2 parts; water, 1000 parts. The greater part of the action seems to be on the gelatine, with the production of brown oxide of manganese in the film, while at the same time the silver of the image is attacked and part of it is dissolved. Now the brown stain produced by the decomposition of the manganese peroxide in the film is so considerable that it is practically impossible to see how far the reduction is going; moreover, this brown stain is irregular. The gelatine is not a homogeneous substance, and that want of homogeneity becomes evident when it is treated with potassium permanganate because, in many cases, the action of the permanganate on the gelatine is markedly uneven. The action of the permanganate on the silver is also uneven, probably for a similar reason, because where a large proportion of permanganate is reduced by the gelatine there will be less left to act upon the silver, and *vice versa*. In any case the result is that after, as far as can be guessed, the reduction has gone to the desired extent, the film is very deeply stained and the brown oxide of manganese has to be removed by treating the film with dilute sulphuric acid containing some oxalic acid. After this treatment I have found that instead of having, as in other processes, a thinner image of metallic silver, the reduced image is perfectly bleached.

That result I have no doubt is due to the fact that even the best of the ordinary samples of potassium permanganate contains a certain amount of chloride as an impurity, and consequently the silver is converted into silver chloride. If the bleached image is put into an ordinary developer, it is brought back to the state of metallic silver, but in some cases the action is far from regular, and during treatment with the developer there is a reappearance of a brown stain which was not distinguishable in the bleached image, and which I think is not a manganese stain. It may be due to combination of the dissolved silver with the gelatine. However that may be, while this action of permanganate in presence of sulphuric acid is of some considerable interest I have formed the opinion that for the reasons just stated it is not likely to be adopted to any large extent in actual practice.

## BUSINESS METHODS.

BY E. D. BRONSON.

*Proofs and Orders.* Miss Blank calls at the studio, is met by the reception-room assistant; she selects the style and price of picture desired, and is shown into the operating-room, where she sits for her picture, and returns to the reception-room, where the assistant "takes her order," informing her that she can see proofs to-morrow morning any time after ten.

The next day Miss Blank calls, receives her proofs, and the date is recorded in the studio register. The proofs are returned in a few days with an order. The order is recorded under the proper date, and the customer is informed that the pictures will be ready in two weeks from date of order.

The negative is then "written up," the date when the pictures are *due* is written on the envelope for the benefit of the retoucher and printer, and they fully understand that no excuse, save that of sickness or death, will be accepted for the non-fulfilment of the pledge.

*Result.* There is no coming the second time for proofs or pictures. Pleased customers; happy photographer.

*A Word About Payments.* Pay all bills as soon as the goods are received and found

to be true to order, and thereby secure the cash discount.

Pay your assistants every Saturday night; pay all other obligations on the *first* day of each month. Balance your books and send a reminder to everyone owing you.

My rule is strictly payment at the time of sitting.

Every photographer knows, however, that such rules do not always work. Some come, receive sittings, get their proofs, and that is the last you see of them. To such we send (on the first of the month) the following letter, varied according to circumstances:

"MR. BLANK, Montrose, Pa.

"DEAR SIR: In closing my books for April I find I have several excellent negatives of your children, from which I have received no order. Kindly advise me at your earliest convenience as to whether this is due to any neglect or oversight on our part. Desiring to serve you to the best of my ability, I am, respectfully yours,

"E. D. BRONSON."

This seldom fails to have the desired effect.

*Advertising.* If you are living in a small town, make a contract with not only the papers in your own town, but all in your immediate neighborhood. Arrange for local advertising at so much per line, including paper and a change of copy each week. This done, secure a blank book which will be known as the advertising book; at the top of the right-hand page place the name of the paper, together with contract. As the papers are received, cut out the locals, paste them in the book on the left side, and credit the paper with the same on the right-hand page. [Challen's *Advertisers' Record* is a convenient book of this sort, but has no space for "clippings."—ED. W. P. M.]

On the first of each month send a statement of *credits* to the publisher, with check enclosed to pay for the same.

*How to Write the Locals.* Four rules, which the writer has had reason to be thankful many times that he adopted and lived up to from the beginning of his business career are:

1. Never cast reflections on your competitors.
2. Never use extravagant language.
3. Be thoroughly honest in all that you say.
4. Put all the enthusiasm possible into each local.

Write locals for each week four weeks in advance; study them carefully; revise until satisfactory; then secure a hektograph and a bottle of ink, write your "copy" with great care, duplicate it as many times as you desire copies, and send a copy to each paper, retaining the original. When the papers are received, if the local is not correct we write on it "Not true to copy," and return it to the publisher, and record it in the advertising book as an error, and give no credit.

*Keep Your Studio Clean.* Have a regular day each week when the rooms shall receive a thorough cleaning (we do ours on Monday). At this time the dark-room is overhauled, all solutions replenished, filtered, and made ready for immediate use, and everything is clean.

*Results.* The remarks of the public concerning your rooms are always in your favor. No keeping customers waiting while you mix fresh chemicals or use the old at the risk of losing the negative.

Now, I imagine I hear someone saying, "That sounds all very well on paper, but I question the practicability of some of it."

For the benefit of all such the writer wishes to say that he stands ready to give the names of all parties concerned: stock dealer, those from whom he rents, publishers, employés, and all to establish the fact that every method mentioned in this article is carried out to the letter in the writer's studio, six days in the week, and fifty-two weeks in the year; and that they all have proven thoroughly practical.

---

MR. CHARLES R. PANCOAST, 1215 Filbert Street, Philadelphia, favors us with a very handy note-book for photographic exposures, which amateurs and out-door photographers generally will find convenient. The little book slips into the vest pocket, and, in addition to many ruled pages for the record of exposure details, gives a useful exposure table and table of light values. We believe that copies of the note-book can be obtained on request from Mr. Pancoast.

# A FEW HINTS ON POSING MEN.

BY JOHN A. TENNANT.

THERE are few things which the photographer is so reluctant to undertake as a half or three-quarter figure pose of a man. If you look over the work displayed at any studio, you will find that the portraits of men are almost invariably "heads." "You can do nothing with a man in everyday dress; he is so stiff and ungraceful," is the explanation generally offered when inquiry is made. One consequence of this want of courage is a lack of familiarity with the masculine figure which, naturally, results in failure when work of this sort has to be made to order. The amateur, on the other hand, with his simpler and more direct methods, knowing nothing of that fear of the public which restrains the professional worker at every turn, tries all things, including figure studies, and hence his figure portraits are, as a rule, acceptably interesting. I would like to urge professionals to give more attention to this neglected field as one which affords abundant room for their skill; and I will be glad, indeed, if anything in these hints will encourage my coworkers under the skylight to attempt the figure more often in their portraits of men. There is really no difficulty about the work which cannot be overcome by observation and practice, and, assuming a reasonable knowledge of composition, no branch of portraiture is more fascinating than the treatment of the figure.

In poses of men, where more than a mere "bust" is desired, the principal difficulty is to secure variety and naturalness without strain or affectation. This is, in part, due to the severity of the lines in masculine dress, and the self-consciousness (with its accompanying rigidity) of the average man when he faces a camera. These conditions being constant, the photographer easily falls into the employment, for all his portraits of men, of a few stereotyped poses which have been found to be acceptable. These stereotyped arrangements, which are well known, are the things most of all to be avoided, while, at the same time, attempts at novel or fancy poses should be shunned with equal aversion. Simplicity is the key to success. In portraits of men we want character and virility rather than novelty or prettiness. If we have strength and ease we can dispense almost with grace. If grace can be combined with these, so much the better, but the dominating qualities expressed in the pose should be strength and action, as befits manhood. If we look over a collection of portraits by modern painters (who necessarily give more study to the pose than the photographer has time for) we will find that in their portraits of men they rarely attempt anything beyond the simplest pose. Usually the pyramidal form of composition is adopted as most expressive of stability and symmetry; whatever grace the subject may possess is judiciously emphasized by convexity of outline, and long, flowing interior lines; the rest is accomplished by harmonious lighting and the obtaining of a characteristic expression to give likeness.

If a standing three-quarter or full-figure portrait of a man is desired, we must seek, first, an easy attitude; second, a pleasing variety in its lines, and last, but not least, a graceful disposition of the hands. The attitude should be characteristic; every man has his favorite poses, which he takes unconsciously when he feels "at home" in any place. Some of these lack grace, and the endeavor should be directed to finding which of the natural attitudes of the man is most graceful. This can most easily be accomplished by allowing the subject to move about the room at his leisure, when his manner of carriage may be observed. It is folly to at once place a man in this or that predetermined position and "arrange" him to suit your notion of how he should appear. This can only result in awkwardness. In many of the portraits we see of men it is obvious that the subject has been made to take an attitude altogether strange to him, and naturalness cannot be expected under such circumstances. Another very important point in the disposition of the figure is to see that the subject

does not rest equally on both feet—something which is wholly incompatible with ease. Attention to this will not only secure ease, but also give a greater variety of line to the pose. Speaking generally, old men give a better line when seated, and an easy chair, with its ample flowing lines, gives to such subjects the graceful dignity which belongs to age. Younger men, especially those with slight figures, can rarely be made to look comfortable or graceful when seated, and, still speaking generally, such subjects are best handled on their feet.

The placing and arrangement of the hands in portraits of men are matters of considerable difficulty. The first care, since they catch the light almost equally with the face, is to see that they do not appear exactly opposite to each other, or form any definite geometrical figure in relation to the face. When they are brought together care is needed to secure a pleasing outline, so that they shall not appear awkward in shape. Neither should the two hands be separately occupied, as this would draw more attention than they should otherwise have in a portrait and create confusion. Sometimes the hands are so placed that, even though both are not occupied, each attracts the eye. This can be avoided by subordinating one or both in tone or "value."

The general lines of the pose of a man should, of course, suggest animation, but too much action should be avoided. Remember that angles suggest action, unrest, and motion; vertical lines support; horizontal lines, or long horizontal curves, are expressive of dignity and repose. An excellent method of studying the disposition of the masculine figure is a lay figure of small size.

The supreme interest in a portrait is likeness, the portrayal of personality. Our first care, therefore, must be to make sure that the attitude or disposition of the figure shall accentuate or harmonize with the character revealed in the face of the subject. The photographer labors under great disadvantage in this; he usually sees his subject for the first time at the actual time of sitting, and there is little opportunity to study what is characteristic. With the amateur things are different; his subjects are generally people with whose life and manners he is already familiar by association. Where these are not known, it is well worth while to delay the sitting a few moments, and by conversation or other means to cause the subject to forget the work of the moment and unconsciously express those little details of manner or attitude which "make the man." It is evident from this that the pose must be dictated by the nature of the subject, and herein we get our first glimpse of those principles which, to my mind, are of the greatest importance to the portraitist: simplicity, concentration of interest, and subordination.

As to the various forms employed in the composition of the figure, I am not sure whether it is wise to say much about them here. The reader who will treat his subject with the aim to get grace of line throughout the figure, bearing in mind the elementary principles which have been referred to, should be able to get a pleasing pose without working for any definite form. The principal forms are, however, the pyramid or triangle, which may be inverted, erect, modified in height or base width; the circle, ellipse, and an oval figure within a rectangle. Of these the pyramid is peculiarly adapted for the single figure and has in consequence been overdone. The ellipse has advantages for large groups, while the oval within a rectangular space may be used for groups of two or three persons. It cannot be too strongly emphasized, however, that these forms should only be suggested when employed, and that their too close following in the *contour* of the pose gives stiffness and formality.

Attention should also be given to the proportion of space occupied by the figure within the confines of the picture, and to the shape formed by the relation of the outline at various points to the bounding lines of the picture. Large areas of background are usually to be avoided unless isolation of the figure is intended or desirable. Figures which are too large for the space they occupy are unpleasant; if too small, the effect is stagey. A little effort will enable the operator to choose both the place and proportion for the figure needed to produce the most pleasing effect in the portrait.

# THE NEW STRAUSS STUDIO.

LIKE the proverbial Phœnix, or that Queen of Sheba of whom Rider Haggard's story tells, the Strauss Studio, of St. Louis, has passed through the fire, only to arise more beautiful and more fascinatingly interesting than before. In its original state the most notable of the photographic studios of the world, it now stands beyond comparison—a veritable palace of photography.

Those who remember the account of the first opening of the Studio, given in our issue of August, 1897, will recollect the exterior appearance of the building. It is located on Grand Avenue, at the corner of Franklin Avenue, and is set well back from the street, to give space for carriage approach and for artistic effect. In its lines and sturdy proportions, with its circular tower and deeply recessed windows, it resembles an old chateau of the sixteenth century, such as may be found here and there in Northern France. Fortunately, this fine exterior was not seriously damaged by the disastrous fire, although the interior was completely gutted as far as the street level.

In the refitting of the interior, which has occupied Mr. Strauss for many months, artists and artisans have worked in harmony, with the single aim to make the place surpass even its former elegance and beauty. How well they have accomplished that task may be seen from the accompanying engravings. These show simply the general design. The exquisite coloring must be supplied by the imagination of the reader, aided by the description which follows.

From the street entrance, a heavy oak door set in the tower which forms so striking a feature of the building, one enters a circular vestibule in dark red leather, picked out with figures of golden nail heads. Here we are greeted by a stalwart attendant in buttons, who seems to fit the vestibule with its heavy beamed oak ceiling and rich mosaic floor, lighted by miniature loopholes of leaded glass, as though he had been hewn out of the same material and polished off under the direction of the master mind of the architect.

A glass door opens silently, and we are ushered into the reception-room, an apartment which, by its roominess, impresses one as comfortably large—larger indeed than the exterior of the building would lead us to expect. The walls of this room

VIEW FROM THE VESTIBULE UPON ENTERING. BALCONY AND EASTERN END OF THE RECEPTION-ROOM.

FRIEZE IN RECEPTION-ROOM: "GOLF." *By Stoddard.*

are tinted in old ivory, the eburnean effect being singularly rich under the delicate lighting from the stained-glass windows. Over it is a panelled and beamed ceiling, from which hangs a massive electrolier of burnished iron, exquisite in its design and extremely graceful in its general effect.

At the eastern end of the room is a wide balcony supported by columns and antæ, with carved capitals and consols. This balcony overlooks the reception-room and extends backward to the exhibition gallery, from whence it is approached by a wide oaken stairway with a pedestalled, double-newelled approach, supporting old bronze oil torches of Roman design and surmounted by antique vases bearing vines which are gracefully intertwined with the open panel-work of the baluster. All this is suggested in the view from the vestibule door as one enters the building. The rich leaded glass canopy of the exhibition gallery casts a soft, radiant glow of light over the room and its pictured walls which

"SUMMER." "AUTUMN."

FROM THE FRIEZE IN RECEPTION-ROOM: *By Stoddard.*

FRIEZE IN RECEPTION-ROOM: "A MAY MORNING." *By Stoddard.*

are hung with a blue velvet of excellent atmospheric value.

The reception-room has a decorative frieze with a series of panels by Stoddard, some of which are seen in our reproductions. These panels are highly attractive. The central panel is a beautiful figure of Spring, full of new and soft color, the figure posed in an attitude of quiet delight, with flowers in her hands. On either side are more imposing canvases representing Summer and Autumn in an attractive way. The figure of Summer is rich and luscious and warm, and just sufficiently languid to convey the spirit of the season.

Over the mantel under the balcony, with its mosaic hearth and Cloissonne vases, is set in a typical Pike County, Missouri, farm scene, painted by the illustrious Paul Harvey, famous for his pictures of rural scenes and Franciscan monks. On each side of the mantel tapestry panels are hung from rods, bearing legendary tales illustrating Homer's Iliad.

At one side of the reception-room are broad cases with polished mahogany tops in which repose the innumerable portraits of those who have been photographed by Mr. Strauss.

Before going further we secure the guidance of Miss Reith, of the order department, a lady possessing a most remarkable faculty of remembering and associating not only the names and faces of those whom she meets, but also recognizing their voices when they use the 'phone. In recognition of this remarkable faculty, a perfect jewel of a 'phone cabinet has been placed in her department, and in her honor. Behind this cabinet is a Florentine brass railing of fine design and workmanship.

Passing through this room to the stairway, we have a glimpse of the office,

PANEL IN MANTEL OF RECEPTION-ROOM: "UP IN PIKE CO., MO." *By Paul E. Harvey.*

1. MANTEL IN RECEPTION-ROOM.
2. LOOKING FROM EXHIBITION-ROOM TO VESTIBULE.
3. A VIEW OF THE OFFICE.

two views of which are shown in our engravings.

We are now in the display-room, abundantly lighted from the ceiling, the walls lined with soft red velours, so soft as to be almost black, giving one the impression of stepping from a room of ivory into one of rich ebony. The walls of this room show carefully selected examples of Mr. Strauss' work, some of which are in color.

Ascending the great stairway at the left, we reach the balcony, and so secure a fine view of the reception-room and the display gallery, or salon. Here we find ourselves face to face with the Gallery of Immortals, a remarkable display of hundreds of portraits of distinguished St. Louisians, men who have made St. Louis famous in many lines of activity.

From this room we pass into the music alcove, where are many pictures by noted masters, hung upon tapestried walls of soft, mellow hue, lighted with little electric bulbs around the ceiling, and provided with luxurious lounges and a piano. At the further end of the alcove is a circular room, the walls of which are covered with a red, fire flashing velour, encased in ebony wood-work, and studded with oval frames containing portraits of many of the prominent bachelors of St. Louis.

From a convenient point on the balcony the stairway continues to ascend to the lounging-room, a delightful room, the walls of which are covered with a red fabric of Oriental design, with brackets suspended from the walls. From this room radiate many smaller retiring rooms for ladies and gentlemen, each of which is provided with every modern convenience, the several rooms being properly decorated and furnished in keep-

ing with their various purposes. The lounging-room has an interesting exhibition showing more Immortals. The retiring-rooms are veritable gems, each decorated in a different color, and presenting attractive harmonies of soft tones and graceful ornament. A broad flight of five or six steps brings us to a massive panelled door, by which we enter the studio-room. This room we believe is the largest, and certainly the finest, ever erected for studio purposes. The general effect is magnificent. The massive rafters of ebony black, angling down to the side beams, are supported by grotesque carved corbels of unique and diversified design, representing many nations and races, and a multitude of emotions. These grotesqueries are most interesting as studies in expression. The walls of the room are covered with blue-green fabric, each wall and ceiling panelled, showing a cardinal red border of simple design.

The skylight itself, always a difficulty to the architect, has been handled in a very graceful way, conforming in its contour to the construction of the room. An enormous chandelier, designed in the sixteenth century style, is suspended from the roof timbers, and quaint candle-holders break the broad surface

MANTEL IN STUDIO-ROOM LOOKING TOWARD THE DEN.

THE STUDIO-ROOM.

A VIEW OF THE DEN LOOKING TOWARD THE DOOR LEADING TO STUDIO-ROOM, WITH PORTRAIT OF GUSTAV CRAMER.
*By Waldeck.*

of the side walls. An interesting feature of the studio-room is the fireplace shown on page 253. This is surrounded by a rosewood cabinet of ample proportions, faced with leaded glass of many colors, the separate compartments being filled with curios.

Immediately adjoining the studio-room, and entered by a door near the fireplace, is perhaps the most interesting room in the building. This is the "Den," where Mr. Strauss works out the ideas so attractively expressed in his pictures. This is a circular room, the walls alternating with panels of glass mosaic and mural paintings by such well-known artists as Waldeck, Howe, Onderdonk, Burninghouse, Harvey, Cornoyer, Dwyer, and others famous in the world of art. The result is a remarkably interesting group of pictures, among them an excellent portrait of Gustav Cramer Esq., which may be seen in the engraving of the room. The ceiling of the "Den" has a coronet of electric lights, through which one looks into the tower above, which is decorated in royal blue tapestry, studded with Oriental heads over the spandrels formed by an arcade of stained-glass windows. The ceiling supports a chandelier of old silver. The general effect is extremely rich.

The mounting-room, the retouching-room, and the other work-rooms are most interesting in their equipment. In the basement is a large fire-proof vault containing over 200,000 negatives, dating back to the year 1877. These negatives passed safely through the fire of 1900, and form the basis of the "duplicate" trade which has always been a feature of Mr. Strauss' business.

With this we finish our journey round the studio and sit down to a chat with Mr. Godlove, the genial business manager of the studio. As we admire the fine bronze figure "Le Reveil de la Source," by Chas. Perron, presented to Mr. Strauss by several photographic friends, we learn of an

GROTESQUE CORBELS IN STUDIO ROOM.
THERE ARE TWENTY OF THESE HEADS, NO TWO ALIKE.

intention to build on the space at the rear of the studio a great herbarium, in which patrons may be photographed amid the plants and shrubs and the ripple and tinkle of fountains. This will permit of effects in portraiture not possible with the painted screens, papier-maché rocks, and similar devices now employed to simulate outdoor effects. The gallery will open directly into this beautiful garden, which will undoubtedly be a most attractive place for visitors to the studio.

No description can give an adequate idea of the wonderful combination of color and design, the arrangement of paintings, statues and vases, rugs and fabrics which meet the eye at every turn. There is abundant room for the work of the place, and no impression of crowding. Everything has its place, and everywhere the impression is one of harmony and good taste. It is impossible to make a journey to the Strauss studio and not end with the conviction that Mr. Strauss is not only a genius in photography, but also in the wider worlds of artistic expression, architecture, and decoration. The new studio is a work of which he may well be proud, and which must command the admiration of the craft here and abroad.

---

*Alvord's Opaque* is an old convenience in a new form, made by the Alvord Opaque Co., Detroit. It is a paste, dissolves quickly and spreads very thin and smoothly, so that it can be used directly on the negative instead of paper. It does not crack or chip off when dry, nor will it adhere to or discolor the printing paper when used on the face of the negative.

The professional will find this opaque of great use in making prints with white margins, and it is equally useful for blocking out or spotting. It is easily removable with water, and will mix with any other water color.

"LE REVEIL DE LA SOURCE." *By Perron.*
BRONZE FIGURE PRESENTED TO MR. STRAUSS BY PHOTOGRAPHIC FRIENDS.

# THE SITTER.

BY A PROFESSIONAL PHOTOGRAPHER.

To judge from the criticisms so frequently and sweepingly passed upon us, we of the camera must, indeed, be in need of regeneration. But is the criticism a good one? I venture to think not. If only the critics knew, as we know, what a variety of sitters we have to deal with they would know how difficult it often is to obtain anything beyond the required likeness. And I would like to ask why it is necessary to obtain some art or feeling, or whatever the current cant phrase may be, in every picture we turn out. As careful workers, we are always trying to do justice to any graceful or appreciative sitter who visits the studio, but for the general run of work we have to be content with Sunday clothes, full face, and be sure to show the ring or the watch-chain. I think that the next real advance in photographic portraits must come from the sitter. Especially is this the case in the matter of dress. There is a general belief nowadays that a good picture can be made out of any subject, whatever the color, texture, or fashion of the dress. But this is far from being the case. Sometimes a lady is photographed simply because she has got a new dress, the idea being neither more nor less than a photograph of the pretty frock. I would like to see any man who could guarantee to turn out a graceful picture under such a chance. He has no opportunity to go for line or grace or naturalness or anything else but simply the texture and cut of that dress, and if he turns out a technically good picture with the negative virtue of being free from faults of a glaring kind, he has done well.

What is needed is an education of the sitter as much as an education of the photographer. Why should not all sitters learn that as a general rule silk and linen do not combine well together, but that linen is better with velvet or cloth, and that laces, furs or soft materials go well with the latter. Then, apart from any question of dress, a photographer must learn much patience under disappointment, for when he does make a thing which does him credit it is odds that the customer won't like it. Suppose a lady comes, in graceful walking costume and a picture hat, perhaps with drooping feathers. Such a subject is often very effective as a profile, and you make a dainty full-length. Yes, it may be very pretty, but how often it fails to pull an order. Then take a full-face, head and bust *and* hat. The hat overlaps the rest like a bundle borne by a Southern mammy, and the result is an order. I often think of George Catlin's story about the Indian whose portrait he painted. He did it in profile, and the Indian thought he had left out the rest of the picture because he didn't think it worth putting in, and was insulted accordingly.

There is a big need just now for some one to take up this question of the sitter. I don't mean that we are to make everybody understand art, or even a good photograph, but they should understand a few things about dress, and they should know that most of the say ought to be with the photographer. I wonder if other photographers have my experience in this matter. I find sitters more difficult to handle now than was the case ten years ago. They really know no more now than they did then, but they have got hold of a few phrases, and want a Rembrandt or a vignette. The curious thing is that it is usually the wrong build of people who want the special style.

I should like to hear what other photographers think about it. My practice is to hang two kinds of pictures in my reception-room. I hang good likenesses of people that are well known, and I hang my "pretty pictures." I find that people are interested in these latter, except when they are of themselves. Then they want likenesses; and so likenesses are what I give them.

---

In *Mosaics, 1901*, may be seen nearly 100 examples of posing and lighting by as many photographers.

# PORTRAITURE.*

BY HAROLD BAKER.

PORTRAITURE is a subject which, I suppose, all photographers, even the most hardened, attempt at some time in their career. It is, I think, really the most difficult branch of photography that anyone can attempt.

One of the points upon which I generally make a good deal of comment is the question of background, in its various forms, for different styles of pose and lighting. The slide now upon the screen gives the result of a curious and interesting experiment. I took three plates from one and the same box, and made three separate exposures upon the same model, stopping down the lens so much that I could time the exposure by my watch. Please remember that the plates had an identical exposure, and that they were developed in the same dish for the same time. The slide was made from the three negatives, without any touching whatever. You will at once remark the great apparent difference between three photographs, but the only difference is one of background. In the first photograph it is white, in the second gray, and in the third a dark background has been employed. I think that you will agree that the differences between the three faces is almost incredible on this explanation, but I repeat that the three exposures, the development, and the making of the slide were absolutely identical.

In the photograph with the white background the face appears under-exposed, heavy, and lacking in luminosity. In the second picture, with the gray background, the effect is perhaps about right. In the third picture the face appears quite over-exposed and flat. Thus in using a white background you want to give probably at least three times as long an exposure as with the dark background, other conditions being the same. But of course, as a general rule, one does not use the same lighting for a black and a white background; the result, however, is a startling one.

* A lecture given before the London Camera Club and published in the Club Journal.

In making the experiments with such surprising results, I eliminated all chances of difference of conditions, and the negatives themselves are not retouched. It will be seen, therefore, that the depth of the background has a great influence upon the final result, and upon the exposure as well. I now show you a suitable lighting for a white background, and again one that is more suitable for a dark background—the two being quite different.

The following incident illustrates one of the difficulties that the professional portrait photographer occasionally meets with. A lady came to me one day and said, "I want you to take my little girl's photograph like this" (showing a print with light, fluffy hair). "Very well," I said; but when the child came she had jet black hair, cropped quite short, and a straight-cut fringe over her eyes, whereas the little girl whose photograph was to set the style was of quite a different appearance. It was quite impossible. Here again is a background quite unsuited to the lighting—the background is white, but the lighting is such as can be used only with a dark background. In the next slide we have precisely the same exposure and lighting, but a different and suitable background.

There is another point of which, doubtless, most of you are already aware, and that is that the lighting you see in the subject, and which you see on the screen, is not the lighting you are going to get in the finished print. The shadow side of the face may be full of modelling and luminosity on the screen, but it will be dark and heavy and exaggerated in the resulting photograph.

There is also a great difficulty in preserving the relative tones of a face and a white object like a collar. You all know this, and the photograph on the screen will serve to illustrate my point. The next slide is to show what can be done with reflectors. First, we have a negative exposed without a reflector, and the shadow side of the face is, as a consequence, too dark. In the

second picture we have an identical exposure, but the reflector on the shadow side has entirely got rid of the objectionable feature of the previous example. There is, however, a great risk in using reflectors, and you may easily ruin your effect and take out all sense of modelling in the portrait. Sometimes when working in an ordinary room you may not be able to get the desired lighting, owing to the absence of any means of control. In such cases improvement can often be effected, and a nice soft lighting on the face secured by altering the background. In this picture the background is too light, but in the following slide the same background has been turned away from the light a little, making it darker, and lighting the shadow side of the face.

In photographing full-length figures you find that the swing back of the camera, which many people disregard altogether in portraiture, is very useful. One does not want the whole of a figure perfectly sharp, as a rule. It is the eyes and face that are supposed to be the points to focus upon. Slight diffusion in the other parts of the figure, if not too palpable and obtrusive, is to be desired; but unless you use a swing-back for some classes of full-length poses too much diffusion or want of sharpness is the result, and we ought to be careful to

PORTRAIT OF MR. A. J. *Copyright, 1901, by Arthur Hewitt.*

avoid attracting attention by the degree of diffusion. The position of the camera as to height is also very important. Portrait painters always pose their sitters on a "throne," and look up at them. In photography this is not advisable. You exaggerate the width of the nostrils, particularly in full-face portraits, and the line of the jaw is also strongly exaggerated. There is a photographer in London, whom I will not name, but you can always tell his photographs because of the prominent line of the jaw, due entirely to the camera being too low. Here is a photograph taken with the camera as low as the stand would permit. It is not unpleasant in this case, but, as a rule, the effect is a little disagreeable.

I want you to remember that all these photographs are untouched. The ladies, I think, were particularly good to allow their portraits to be used in such a condition without retouching, but I wanted no doubt to arise that might be attributed to this cause. The next slide is the same pose as the last, but the camera has been raised as high as it will go, and we are looking down upon the sitter. It exaggerates the top of the head to some extent, and raises the distant shoulder, and throws down the near shoulder, producing some degree of distortion, and altering apparently the position of the sitter. It is impossible to draw hard and fast rules as to the height of the camera, so much depends upon the sitter, who may have very wide nostrils that call for the camera to be placed a little higher than usual in order to avoid an exaggeration of the breadth of the nose or some other strongly developed feature that equally requires a particular disposition of the camera to modify its effect. Discretion in this matter is half the battle, as in most matters photographic.

In dealing with three-quarter length figures one of the chief difficulties is that of satisfactorily arranging the hands, and it is made worse for us by the fact that for generations portrait painters have painted their pictures with impossible hands. Reynolds—great master that he was—was a sinner in this respect. It was his habit to paint the faces of his sitters actually from the sitters, but the arms and hands from Kitty Fisher or Nelly O'Brien, or any other whose arms and hands were of an ideal nature. In photographing we get, perhaps, a little exaggeration, and anything that may be displeasing about the hands and arms is at once put down to the camera's reputation for exaggerating such details, whereas, as a matter of fact, it is more correct to say that the photograph has rendered the sitter with far more truth than the average painting.

I now show you what I think is a very graceful pose—perfectly spontaneous. All sitters, however, cannot imitate this style, or easily pose themselves. The next few pictures show the different effect produced by turning the hands edgeways instead of broadside on. The next few slides show graceful arrangements of hands. All spontaneous poses are not graceful, of course, but they may often be made good by some slight re-arrangement of hands or arms, or head, that suggest themselves to the photographer. Here is an example of bad drawing in the hand and arm, such as to make the portrait useless, but in the next slide we have overcome the defect. This lady had a long upper lip, the obtrusiveness of which it was my aim to conceal. The result is not altogether satisfactory. It is too much posed; it took a long time to get right, and there is evidence of it, consequently it is bad.

It should always be borne in mind that accessories should never be used if you can possibly dispense with them.

It may interest you to know that of the lady whose photograph has figured so considerably here to-night I took just five dozen portraits while she was in the studio an hour. One rather striking pose has been very much copied since, but not successfully; everybody seems to have missed the very thing that made it a success.

Very often it is possible to secure excellent results in ordinary rooms, and, as plates are now so rapid, the percentage of successes is far higher than it was a few years ago, when such things were almost entirely out of the question. A sitter in accustomed surroundings is naturally more "at home," and consequently one may frequently get a very natural and real portrait. The portrait on the screen was a surprise to myself. It was taken in a room with but one window, and that six or eight

feet from the ground. The sitter was facing a full front light, yet the result is astonishingly good. This, I think, gives us a new idea. Instead of putting the sitter close to the window, so as to get a strong light on one side of the face and a shadow on the other, which is relieved by a reflector that often only serves to destroy the modelling of the face, put the camera in the window itself and the sitter back, not necessarily fronting the light, but so if you wish. Portraits produced in this way are sometimes superior to those produced in a studio.

Above all, do not worry your sitter. Try everything of an experimental nature on your assistant, and you will get your poses ten thousand times better. Crookes, speaking of poses, says that the best poses a photographer gets are those which he observes and not those which he creates, and I quite agree with him. You will see a few spots in the background of a photograph I now show you. With a little touching these can all be put right. It is a perfectly legitimate practice to do this on the negative, to rub down with spirit, scrape with a lancet, or touch up with water-color.

As I have already stated, many of the most successful portraits now done are those taken in ordinary rooms. The amateur portrait photographer will probably sigh for a lens specially suited for portraiture, but it is not at all necessary. Some of the best work is done with the ordinary rectilinear lenses, particularly with those working at large apertures. These lenses are probably much better than the old portrait lens, which was designed solely for rapidity. A good rectilinear, or one of the Goerz type of lens, will do quite as well for portraits, but they should be of long focus. For a half-plate portrait you want a lens of not shorter focus than ten inches or twelve inches, and this is none too long. Distortion and unnatural effects are the usual result of the use of short focus lenses for portraiture. They are, therefore, to be avoided.

If you can get a sitter capable of keeping still for a prolonged period, it is well to give a long exposure, not by stopping down the lens, but by subduing the light. Portraits that have had up to a minute's exposure are always better than instantaneous ones. There is a change of expression without perceptible movement of the face, and the result is consequently far more lifelike than of the usual exposure of 3 or 4 seconds, or less. A painted portrait is for this reason so much more like a sitter than a photograph. You get a series of portraits blended in one; but in the instantaneous photograph there is only one unnatural, uneasy phase that is not nearly as good as the picture produced by an extended exposure. If a long exposure cannot be given, a rapid one is better than one of 10 seconds or so.

As regards lenses, the Bergheim-Dallmeyer lens is very useful, but not to the professional man—it may be for the amateur portrait photographer. The plates used should not be those specially suitable for outdoor work or architecture. You do not want the same kind of negative, but one much less dense—no bare glass and no intense high lights. On the screen you see such a negative as is suitable for a portrait. For development I have a preference for some of the newer developers to pyro-ammonia, because they give a quicker printing negative, which is of much importance to the professional photographer, and also a softer negative with more detail in the shadows. They give, as a rule, less contrast—a quality that is eminently suitable for our work.

Retouching is a necessary evil, but you can minimize it. This slide is from a negative fairly fully exposed, and, as you perceive, there is no need for much retouching. The next picture, taken at the same time, but under-exposed, shows an immense difference, as far as the need for retouching is concerned, and forms a further argument in favor of full exposures. Under-exposure, in fact, is one of the bugbears of portrait work. Over-exposure is better. The negative must have no opaque parts and no clear glass shadows. Opinions vary, I know, considerably. Scientific and technical men of course insist upon having clear, bright negatives; but my own experience tells me that the negative which is going to give you a print which you will like best is what the technical men call a bad one.

I now show you an effect of lighting which took me a year to get to my liking. It shows that one must not get discouraged

by repeated failures. I can now reproduce this lighting at any time. Here is a photograph that had a very long exposure. There was considerable change of expression, but the portrait is quite natural.

Children are the bane, as well as the joy, of a photographer's life. A lady once came to me with a proposal that I should take a lot of photographs of her little girl, as she wanted to get as good a pose as possible, from which a painter was to be commissioned to execute a portrait in oil. This is the sort of thing that actually happens. An artist gets the credit for what is absolutely the work of the photographer. The child was a wilful little thing, and there was much difficulty in getting her into the dress chosen. A pet cat had to be brought to her to play with. The diplomacy that had to be exercised was astonishing. We had to assure her that we were photographing the cat, and eventually got the child herself without the animal at all. As a matter of fact, the series was very successful, and the last of them that I show you was done as the cat jumped away, and the child cried excitedly, "I have his tail, mother!"

The electric light is quite capable of being arranged to give beautifully soft results. The various colors you have seen in the slides are all the result of exposure and development unaided. Lantern slides do not give the effect that a print does—there is not the same breadth and feeling, so I trust you will make allowances. Some people say that many special effects of lighting are got by retouching, but, as a matter of fact, the amount of modification of lighting in the face by retouching is infinitesimal.

## THE PHOTOGRAPH AND ITS MOUNT.

BY J. HORACE MC FARLAND.

In earlier days mounting was a very simple matter, for nearly all photographs were of the brown or purple tones obtainable on glossy albumen paper, and white cardboard was esteemed *de rigueur* for mounting them upon. If anything "swell" was contemplated, the white card had a gilt line surrounding the place for the photograph, and later various embossed forms came into use, nearly all, however, white only, regardless of the tone of the photograph. I well remember when platinum prints began to be made, that the daring innovation was introduced on a card mount, white on its face, to be sure, but with a tinted piece of paper just a little larger than the arbitrary dimensions of the print to be pasted on its centre. This was the beginning of a happy change, for it seemed to hint that a photograph might endure the proximity of other than the dead white borders provided by the regulation card. One was expected then to mount the whole of his picture, trimming off nothing whatever, for the better class of mounts had "openings" of the exact proportions of the standard plate sizes.

The infusion of art principles into what but a few short years ago was deemed a purely mechanical process has given us now a host of rich tints and colors for mounting surfaces, as well as fostered a study of the principles of harmony and contrast. At the present time there are many fine materials available, so that no excuse can be made for faulty or inharmonious mounting.

In considering appropriate mounting, on proper methods, it is well to have a look at the principles which underlie the work. Every picture, either in monochrome or otherwise, has some dominating tint or color. The photographic print on one of the ordinary glossy papers gives a predominating brown or purplish tone; the black, white and gray of platinum, bromide, *Velox* or equivalent papers are indicative of a range through the grays; the carbon prints are positive in their varied pigment tones; and the "gum" productions introduce any desired color. In any one there is but one ruling tone, and the proper mount for the picture must, to be permanently and truly satisfactory, either harmonize with this ruling tone, or agreeably contrast with it along the well-known lines of complement.

Color contrast is difficult to manage, for many of us, and it is usually safer to cultivate first the sense of color harmony. Control of contrasts may well follow, and one

can study the subject in every waking moment which can be spared from the grind for a living, without ever exhausting the possibilities. A ramble in the country, in winter, summer, spring or autumn, will teach much of contrasts and harmony of color, if the eye be but appreciative. The shifting play of color on surfaces of water, the values of reflected color, the hues of flowers and trees—observation of all things through the color eye and with color sense—will tend toward a just appreciation, meanwhile vastly increasing the joy of living and seeing.

Taking first, then, the safe ground of color harmony, we find that a mount is indicated for a photograph which continues the predominating tint of the photograph. Simple and easy as this dictum is, it seems to miss comprehension thousands of times, as witness the mounting of a black platinum print on a brown or deep green card, or the placing of a purple-toned photograph on a pure gray mount. Both instances are familiar to all of us, and yet with the knowledge and practice of the principle above mentioned, neither error would be made. Take the pure black and clear white, with the intervening delicate gray half-tones, of a well-made platinum print, and a gray or black mount is at once indicated. Nevertheless, in two notable exhibitions, progressing as these lines are written, each of which shows pronounced development along art lines, the mounting seems to have been done in part at random; for in one an exquisite gray effect in platinum is jarred against a frame in dull oak, and numerous brown tones are hung on gray mounts. In this same splendid showing by an artist as proficient with the brush as with the lens, there appear some of the daintiest and most original mounting effects I have ever seen, wherefore I conclude that the errors arise not from carelessness, at all, but from Mr. Eugene's apparent failure to comprehend the underlying principles which he subconsciously practices most of the time! His delicate effects in the use of Japanese papers are beyond praise, and only the occasional slip betrays a certain difficulty. Of the marvellous quality of the photographs exhibited—and unaccustomed observers hardly believe they are photographs—this is not the place to speak. Grasping this simple and elementary principle, that for harmonious relation between picture and mount the dominating tint of the former should be continued in the latter, the merest tyro has in his hands a safe and artistic method of procedure. If his prints are in pure platinum, or in any of the bromide papers—and if he is able in the latter to avoid greenish or brownish blacks—he is safe to use gray cards or papers of any depth. Does he make the lightly esteemed but beautiful blue-prints as an expression of some of his sky or sea negatives, he is safe on a dark blue surface, though just here a fine opportunity for using the contrast principle appears, which I will discuss further on.

If the *Velox* or *Dekko* has not worked to a pure black in the shadows, there is the resource of a greenish-black or brown-black mount, or even a sage-green, for a lighter surface. For general usefulness, I know of no mounting surface equal to the "Carbon Black," made by Collins. It seems to combine brown, black, and green sufficiently to suit all tones of platinum or bromide, and it will wonderfully warm and brighten a print otherwise unsatisfying.

There are attainable many superb dark tones and colors in regular mounting board, but the wise worker does not confine himself to these, by any means. It appears very early in the experimenting that the surface chosen to mount upon must not be glossy, because the gloss reflects light which needs to be absorbed, and thus takes from the attention due to the picture itself. This understood, there is wide choice of papers, those most easily attainable being the modern so-called "cover papers" used by printers for book, pamphlet and magazine coverings. In these same lines are many rich colorings, suitable for mounts for carbon and gum prints. The Princess, Sultan, Defender, Homespun, and Herculean cover papers, and certain "drawing" or "plate" papers will also be found useful.

For very light and delicate effects, rice paper, parchment, ragged or "deckel"-edged linen papers, Japanese papers and the like may be used, always keeping well in mind the desirability of thorough tone harmony between picture and mount.

Sometimes two shades may be used on a

mount, the one showing but a narrow border about the print. Thus a white, black, or gray edge may be given, the mounting paper being trimmed to a size but a little larger than the print, and the latter carefully placed upon it. This double mounting should not be done without a specific reason, lest it become simply grotesque. I have heard of an English worker who manages to use half a dozen pieces of paper of various colors to reinforce his picture, producing thereby a sort of paper specimen affair, utterly at variance with good taste or good appearance.

Much consideration may well be given to the desirability of white margins on a print, and this can best be decided by trying the print, with a white edge, on the mount contemplated. This edge can easily enough be trimmed off if it seems undesirable. I have found it best, nearly always, to use mats or masks in printing, as before detailed, so that the print has a white edge which may be cut down to a mere white line, or left of a greater breadth. A subject with broad masses, in the sketchy style, will need more white margin than the delicate bits, in many tones.

For black and white prints there is often a fine effect produced by mounting upon a very dark gray, the print being trimmed so close as to show no white whatever, and a narrow white line being then drawn at say half an inch from the edge of the print by means of a ruling pen and some Chinese white. This plan is also particularly effective for combinations of several pictures on one mount, serving to give considerable unity of effect. A little practice is necessary to acquire the skill requisite to the making of a smooth white line, but that will not deter the earnest amateur.

In rare cases, with brown prints, and more often with carbons in red, brown, blue, and green tones, this line may well be of gold. Gold has no place, however, with black and white prints of any kind—they need to be treated strictly on a silver basis!

## PLATES FOR OUTDOOR WORK.

WRITING for the photographic readers of an English newspaper, Mr. A. Horsley Hinton gives the following practical advice on this important question.

There are, I know, many of my readers whose knowledge of photography and past experience enable them to judge for themselves what plates are best suited to their particular needs, but that "What plates shall I use?" is a question which many are asking, and seem to find it difficult to get answered, is evident from the inquiries which reach me continually. In the last of *The Photo-Miniature* monographs on all the more useful subjects, which the photographer would do well to possess, the author says on this subject of films and plates for landscape photography:

I have been interested to notice that many makers of dry plates offer plates in three or four grades of speed about as follows: 1. Extra rapid, for drop-shutter work, groups, babies, etc. 2. Very rapid, for ordinary snap-shot and studio work. 3. Medium, for landscape, copying, etc. Now, this is something I have never quite appreciated. I have fully tested the slow plate for landscape, but for me it has no advantages. There are many landscapes, especially those in which the immediate foreground is cut off, for which the slow plate is entirely satisfactory. In making views of mountain scenery . . . the slower plate may be decidedly advantageous; but for any ordinary trip about home, where landscape studies of various sorts are to be attempted in our everyday atmosphere, I find a fast plate essential. If one wishes to put the trees and grass of the immediate foreground into the picture it must often be done between puffs of wind, and there is rarely time to spend on long exposures. If we wish to suggest atmosphere and perspective by differences of forms we want the largest stop in the lens, and this of course gives more time. But even this reduces the exposure on a fast plate to one-tenth or one-twentieth, or even to one-fiftieth of a second; that is so much the easier, and the result seems to me to be equally good on a good plate. In a word, the case is this—rapid plates are needed so often, and it is so much easier to shorten exposure than it is to lengthen it, that the fast

plate is the best for general outdoor work. With this advice I can entirely agree. There probably was a time in the earlier days of plate manufacture when all but the slow plates were very difficult to manage in the dark-room, and the emulsion had a tendency to granularity, and then slow plates were an advantage, but for years past I have always used rapid plates for outdoor work in summer, not the excessively fast brands, but those which in point of rapidity come next. Here, of course, comes the consideration of isochromatic or other color corrected plates, and those which are not so prepared, and if one says he has always used ordinary uncorrected plates and rarely if ever finds any disadvantage, then it is probable he has not had the opportunity of comparing the result from the same subject with an orthochromatic plate and the opposite, and even if in many cases there is no marked gain, still I shall say as I should of very rapid plates that even if not always necessary, in no case are they a disadvantage, and being armed with them you are equipped for emergencies as well as for the commonplace, but the advantages of color-corrected plates are but partly realized unless used in conjunction with a color-screen or light-filter, and again some of the advantages may be thrown away or counter-balanced if the plates are not "backed." So that with my holders filled with instantaneous isochromatic plates backed I feel I have at my disposal all that dry-plate manufacture can do to help the landscape man to success, but they should be carefully dusted before setting forth either after they are in the slides or before; but in mentioning one particular make of plate I am not prepared to say that they are the only ones I should care to use; there is a good deal in habit, and a reluctance to forsake the paths wherein we have met with moderate success to fly to others that we know not of.

I am aware that I have given similar advice to the foregoing on similar occasions, and it is neither particularly original nor revolutionary; but so long as color corrected plates are used to so small an extent when compared to the total consumption of dry-plates, I feel I cannot do better than hammer away at the same nail until it is driven home.

## PHILADELPHIA PHOTOGRAPHIC SALON, 1901.

THE Philadelphia Photographic Salon for 1901 will be held in the galleries of the Academy of Fine Arts, Philadelphia, from November 18 to December 14, 1901.

The purpose of the Salon is to exhibit that class of work only in which there is distinct evidence of individual artistic feeling and execution, the pictures to be rigidly selected by a competent jury.

No awards are offered, and no charge will be made to exhibitors. Each exhibitor will be furnished with a catalogue, which will be the official notification of acceptance.

No exhibitor must submit more than ten pictures, each of which *must be framed* separately.

The title of each picture and the exhibitor's name and address must be clearly written on the labels provided, which must be attached by the exhibitor to the back of each picture. Nothing may appear on the front of the picture except the title and the exhibitor's name.

All communications and all pictures submitted for exhibition must be addressed to the Pennsylvania Academy of the Fine Arts, Broad Street above Arch, Philadelphia, Penna., U. S. A. All pictures must be forwarded at owner's risk, *carriage prepaid*, and delivered at the Academy not later than 5 P.M., Wednesday, Oct. 30, 1901.

The management will use all reasonable care to prevent any loss or damage to pictures in its charge, but will not be responsible for such occurrence.

*Foreign contributors* are requested to submit their pictures, *unmounted, by post*. The management will suitably mount and frame them before exhibition, at no cost to the exhibitor, and will afterward return them by registered post.

*Jury of Selection:* Mr. Charles I. Berg, New York; Miss Frances B. Johnston, Washington; Mr. Allen Drew Cook, Mr. George W. Hewitt, and Herbert M. Howe, M.D., Philadelphia.

## THE EDUCATIONAL CONVENTION AT DETROIT,

### August 6th to 9th inclusive.

THIS is the last opportunity to speak with our readers before the opening of the National Convention at Detroit. Our last word, as was our first word about the first national convention, is to every reader: Put things aside and attend the convention.

Many of our readers will have an exhibit, others will not exhibit for one reason or another; but exhibit or no exhibit, we would urge all to be in Detroit August 6th to 9th next. Unless all signs fail, the Educational Convention will set the pace for the century, and we hope that every photographer who reads these pages will embrace the opportunity.

The various features of the affair have already been detailed in earlier issues; the last words from the officers and a note from Mr. Griffith are given herewith as a final rally.

MAKE AN EXHIBIT IF POSSIBLE.

Every photographer is specially urged to make and send pictures to the exhibition at this convention. It is the first one where all are on the same footing and where it is hoped and believed that there will be such a class of work as was never shown before, work in which the best has been done simply for the love of the art, and not for what is to be gained in the way of medals and prizes.

In former conventions it has been medals and prizes, with a lot of jealousy, heart burnings, and bickering after. This time there are to be no classes or prizes. It is to be work, comparison, and an honest desire to find the good qualities in others' work as well as our own. Is this not the better way? Let us give it a good trial; come, bring your work; put it side by side with others. See what they are doing. Are their pictures better, and if so, why? Let every photographer enter into the work of this convention in the spirit of education, come prepared to steal the other man's thunder, or realize that you are making as good pictures as the best, and if you are not, then go home with the determination that you will make as good as any of them, or know the reason why.

So again we say, send an exhibition and then come yourself.

D. D. SPELLMAN,
**First Vice-President.**

P. S.—All pictures submitted for exhibition must be addressed to D. D. Spellman, First Vice-President P. A. of A., Light Guard Armory, Detroit, Michigan, and delivered by August 1st, charges prepaid.

AS AN INVESTMENT.

Within a few weeks Detroit will herald the coming of the P. A. of A., and all will be in readiness to receive our mentions. In every direction are indications that the meet will be pronounced the grandest issue of our Association, and when its success is proclaimed through all the land, how proud you will feel to be one that participated in its victory.

In the present prosperous business condition you cannot afford to miss it. If your business is not prospering along with other lines something is wrong, and you must come to find out what it is. If you haven't the money, borrow it from your neighbors, or touch your friends for it, but come by all means; it will be your best effort toward improving your business. There will be talks by people who know more than they can contain, and must shed their knowledge, so come with a good receptacle to rake it in, but remember the big head does not always hold the most.

Detroit is known for its hospitality, and those who know enough need not confine themselves to the educational feature, but can turn out for a jolly good time; it will be there for the asking or taking; in fact, it will be heaped upon you.

In return for all that is offered you, we have but one request: send us a few bits of your best work, a week or two in advance of the opening, we will see to the proper hanging. Do not delay, as everything must be in readiness August 6th, and no exhibit can be placed after the opening date. Let us impress you with the fact that your attendance means money in your purse, skill in your art, success to the

convention, and a loyal obligation to the P. A. of A. Fraternally yours,

H. S. KLEIN,
Second Vice-President P. A. of A.

DETROIT.

Photographer, stop and think what this may mean to you. This is an age of progress, and the photographer who does not keep up with every department of his work is bound to fall behind. You cannot afford to let any opportunity go by wherein you can gain. If you have missed other conventions you have regretted it no doubt, but if you miss this one you cannot forgive yourself. Then, too, you go to Detroit, the most beautiful city in all this broad country. You say that is putting it pretty strong? Well, ask any of your friends who have visited it, who have glided over the river's blue waters, have watched the constantly moving panorama of vessels that carry the wealth of the lake cities; who have walked or ridden up and down its broad avenues, or rested beneath the trees in its splendid parks. They will all say the same thing. And it is historic Detroit that will welcome you—in tradition older than Plymouth Rock, and the colonies so changeful in their moods that she has even changed her flag five times. First the lilies of France floated over her people, then the cross of St. George became her shield; later by the fate of nations she came into the fold of the stars and stripes, only to return again to her former royal lover, from whose arms she was again taken to remain forever under the shadow of Old Glory. Ravaged by sword and fire, she rose from her ashes to become one of the gems of the great Northwest. Famous in song and story, she wraps herself in modern robes, but the perfume of the past lingers with her still. Everywhere her praises are sung, but we revel most in her beauty when others enjoy it, and it is to this place that the photographers of America are invited.

Come and bring your wives or sweethearts, forgetting for the time the worry and care of bread winning. A rest is not all that you will receive, for this is the educational convention where you will be treated to a splendid exhibit of what others are doing and have done. You need not fear the decision of the judges—there will be none—each will do the thing that he thinks he can do best, and you can measure your own failings or merits by his success or failure as you see it by comparison. Bickerings, heart burnings and jealousies will find no place at this convention, for there will be no medals or prizes, but every man will stand on his own foundation, and finding it built of sand can steal the corner-stone of his neighbor and begin the building anew of better and grander work than he had dreamed of.

It would be hard to list the good things that are being prepared for you. We can only say come and enjoy them, profit by them, and go back home with new life, new ambitions, higher hopes, and higher aims. A. H. GRIFFITH.

DETROIT, June 6.

Mr. W. I. Scandlin, of Anthony's *Photographic Bulletin*, is arranging a special convention party from New York which offers definite advantages to photographers travelling from Eastern points. Full particulars can be had on application to Mr. Scandlin, care of E. & H. T. Anthony & Co., 124 Fifth Avenue, New York.

IMPORTANT NOTICE.

*Secure tourist tickets to the Educational Convention in Detroit, August 6 to 9.*

In connection with the railroad rate of one and one-third fare on the certificate plan which, with return limit until August 14, has been granted to the Photographers' Association of America Convention in Detroit, there is a regular summer tourist rate to Detroit from all points in the central passenger association territory, which extends to Chicago, Peoria, St. Louis, and Cairo on the west; Cincinnati, Louisville, Huntington, Pittsburg, Wheeling and Buffalo on the east. These tickets are in most cases less than the fare and a third, and have return limit good until October 31, allowing lots of time for side trips, etc. Also tourist tickets can be purchased from almost all points to Mt. Clemens, a summer resort only a few minutes' ride on the trolley car from Detroit.

Those taking advantage of the fare and one-third rate, will pay one full fare from starting-point to Detroit, and at the time of purchasing ticket must get a certificate from ticket-agent, which, after being signed at the convention hall, will entitle them to a rate of one-third the regular fare home.

D. D. SPELLMAN,
First Vice-President P. A. of A.

## BROMIDE AND OTHER PAPERS.

THE actions that take place in the film of a bromide paper are very similar to those occurring in a dry plate film. Both paper and plate are coated with bromide or iodobromide emulsion, though in general the paper emulsion is much slower than the other. A plate, however, when exposed in a camera, receives an impression of color, while the paper in a frame is merely affected by white light or not at all. Of the seven colors of the spectrum, those nearest the violet end are more actinic on silver bromide than those near the red end; hence, a photograph of a subject containing much variety of color will be, as it were, unequally lighted. The red parts of the subject should have received longer exposure, and the blue portions shorter. This is rendered possible by mixing with the emulsion an isochromatizing agent, such as cyanin or erythrosin. A solution of 1 grain in 100 minims of ammonia and 20 ounces of water may be used; ordinary plates may be color-sensitized by soaking them in this solution for two or three minutes, then rapidly washing them to remove excess of dye; they are, of course, dried before use.

When making a bromide paper emulsion we have no difficulties regarding color to contend with; a mixture of silver bromide with gelatine containing a slight excess of potassium bromide is capable of giving the best results. The silver bromide is prepared by adding silver nitrate to a solution of potassium or ammonium bromide, in which part or all of the gelatine necessary has been dissolved. Now, if there be an excess of silver nitrate, the paper will be stained immediately on development; if potassium or ammonium bromide be in excess, the paper will be difficult to develop on account of the restraining actions of these salts; moreover, if ammonium bromide be used, ammonium nitrate will be formed:

$$AgNO_3 + NH_4Br = AgBr + NH_4NO_3.$$

This new nitrate of ammonium is very deliquescent, and if present in the paper will destroy its keeping qualities. It is obvious, therefore, that to render the emulsion suitable for coating we must rid it of (1) excess silver nitrate, (2) excess bromide, (3) any deliquescent salts.

This is affected by dividing up the emulsion into extremely fine particles under an absorbent or solvent liquid. There are two methods: the first is to slowly pour the emulsion at about 90° F. into four times its bulk of alcohol, which precipitates it, and at the same time extracts all the water present, thus removing the soluble salts; the other method is to squeeze the set emulsion through fine canvas or muslin, the whole being held under the surface of water. This wash water, containing the divided emulsion, is then poured through a large filter funnel provided with a muslin filter; the wash water passes through, leaving the emulsion in the funnel; this is scooped out, pressed between dry rags, and then melted up again. It may, however, be first subjected to another similar washing, or it may be placed in a sieve under a tap, and left in running water for two or three hours.

The haloid salts of silver are not by any means the only substances that are sensitive to light. The chloride of thallium blackens in light, and ferrous phosphate also darkens. We know, however, that silver bromide undergoes no visible change after a correct exposure, and that the visible change is produced by the after process of development. Similarly, there are many other substances which undergo invisible changes in light, the most important of them being certain colloid substances, such as gum arabic, gelatine, etc., when mixed with a dichromate. Let us expose a sheet of paper coated with gelatine and then

soaked in a 5 per cent. solution of potassium dichromate, and dried under a glass plate divided into two portions, one of which is black and the other transparent. After a few minutes we remove it and pour warm water over it. Very soon we shall find, on examining the paper, that the part of it exposed under the transparent half of the glass still remains in a sticky condition, while the other part, which was hidden under the black half of the glass, has now no gelatine whatever adhering to it. We gather from this that, after exposure, such portions as had been affected by light were rendered insoluble. If, then, we had previously mixed some coloring matter, insoluble in water, with the gelatine, we should now have a paper half colored and half plain. Thus, then, we have an explanation of the carbon process. The tissue is merely paper-coated with gelatine and pigment. This is sensitized a few hours before use by soaking it in a dilute solution of potassium dichromate. When dry it is printed and then placed in cold water, along with another paper the same size coated with plain gelatine, to which a little formalin has been added, the latter agent causing the two films to stick to each other better. After two minutes' soaking we may place under water the tissue upon the water film to film, and lift them out of the water, together and squeeze them; when they have been left thus for twenty minutes we can place them in water at 120° F. and separate them. Then wash off the soluble pigment from the transfer. It is interesting to note that the hardening action of light goes on after exposure, automatically, so that tissue cannot be kept after it has once been printed; sensitized tissue similarly becomes insoluble in about fifteen days, so that unless it is to be used soon after purchase, it is better to buy the unsensitized paper and soak it in the dichromate at home.

When a metal combines with an acid to form two distinct salts, one of which contains more of the acid than the other, the former is termed an "ic" salt and the latter an "ous" salt. Thus $FeCl_3$ represents ferr*ic* chloride or iron perchloride, and $FeCl_2$ is the chemical symbol for ferr*ous* chloride. There are a great many such salts of iron, and in almost every case the *ic* salt is reduced by light to the *ous* salt. The ferroprussiate process depends on this property. Ferrous phosphate has already been mentioned as a sensitive salt, and it is probably converted into a subphosphate or an oxide.

When an iodide is added to a solution of a mercurous salt, a green impure precipitate of mercurous iodide, $Hg_2I_2$, is formed. If this be applied with a carrier such as gum arabic to paper and exposed, it is partly reduced to mercury, and mercuric iodide is formed:

$$Hg_2I_2 = Hg + HgI_2.$$

This $HgI_2$ can be removed to a certain extent with a solution of common salt, leaving an image of black mercury or low compounds of the same. It is difficult, however, to get a passable result by this process, which is nevertheless of interest, as it offers a method for printing in mercury.

Ordinary paper may be sensitized by brushing it over with a 5 per cent. solution of uranium nitrate. It is printed till the shadows are just visible, and developed with potassium ferricyanide. If the phosphate of uranium be dissolved in tartaric acid and applied to paper, the prints will have more detail than they possess when coated with the nitrate. With uranium phosphate we may compare silver phosphate, which, when treated in a similar manner, yields very pleasing prints.—*Practical Photographer.*

---

*Photography for the Press.* This is the first of a series of manuals on "Photography for Profit," published by *The Photogram*, Limited, London, and although chiefly intended for British photographers, contains much useful information for all photographers producing material available for reproduction in newspapers, periodicals, etc. The kind of subjects most desired by editors, or for calendars, booklets, etc.; plans for making prints quickly, and hints concerning their profitable disposal, with other interesting questions of a similar sort, are fully dealt with. The price of the book is 50 cents, and we believe that our readers can obtain it from Tennant & Ward.

# BACKING PLATES.

BY JEX BARDWELL.

In the early days of wet-plate photography we sometimes had an outdoor photograph to take less than a mile from the gallery. Sending the camera ahead by the boy, we would follow with the plateholder wrapped in a cloth to keep the plate cool and moist, and as an additional precaution we would place a piece of wet red blotting-paper on the back of the plate (in those days blotting-paper was always red), using the wet paper simply to help keep the plate from drying. When taking the bath out and coating the plate on the spot I did not use the paper backing.

Having a good deal of outdoor work, I began to observe that, for some cause, the negatives made on those plates which had the paper backing were somewhat sharper and more clear than the others. We were troubled more or less, according to the subject, with what we nowadays call halation, but it was then understood as being caused by a creeping of the light on the surface of the film.

It was in the sixties that I did most of my outdoor work on collodion dry plates, and finally found the coffee dry plate to give me the best satisfaction. This plate was freer from the halation effect, and the plate worked at its best when in a bone-dry condition. I therefore discontinued using the wet pad. When the dry gelatine plate came into use, halation became more troublesome.

About this time I recalled an account of the cause of halation. The article stated that it was caused by the reflection of the rays of light from the back surface of the glass plate. This accounted for the improvement in my wet plates when packed with the wet red blotting-paper. I could not use wet paper in holders, so I soaked some carbon tissue in glycerine, but I did not like it, and gave up backing my plates. One day I had a call to photograph some plants in a greenhouse, and, on development, I found the plates spoiled by halation. I hunted up a formula, and tried them again. They were so satisfactory that from that day to this I have backed all my plates for outdoor work. I consider a backed plate indispensable for this work; in fact, there are very few subjects but what would be better if taken on backed plates.

Plates can now be procured already backed. The Lovell backed plates are a ready example. To those who may wish to back their own plates I will describe how I do it. I first procure a gilder's mop or a round badger, as the best brush to use in applying the backing, which should be stiff enough not to run on the plate. Open the plate-box and take out two plates, holding them in the left hand, face to face. Dip the brush in the backing and cover the plate. Then turn the plates over and back the other; then set them up to dry. I need not say that this is to be done in a very subdued light. I have a box in my dark-room, having a tight cover, in which I place the plates, and with the backing I use they are dry in fifteen minutes, ready to place in their holders. To remove the backing I have a piece of soft sponge, flat, about five inches long and three broad. Soak the sponge in water, squeeze nearly dry, and go over the back twice. This will remove most of it. Turn the sponge over end for end, and with it you leave the glass perfectly clean.

Backing, too, can now be purchased. The best I have found is Alvord's opaque. It is opaque, dries quickly, and is easily removed. I can strongly recommend it. It is what I use, and is better than I can make it, although there may be others just as good.

*Teape's Backing:*

| | |
|---|---|
| Gum Solution | 1 oz. |
| Caramel | 1 " |
| Burnt Sienna, ground in water | 2 ozs. |
| Mix, and add Alcohol | 2 " |

*Backing Sheets for Dry Plates:*

| | |
|---|---|
| Gelatine | 1 part. |
| Water | 2 parts. |
| Glycerine | 1 part. |
| Indian Ink | a small addition. |

Make a paste, and coat strong paper. Place the prepared material face downward

on waxed glass to set. Press to back of plate before putting into dark slide.

Anything that will improve a negative is worthy of trial. Backing is cheap and easy of application. Its utility is unquestioned. I coat one dozen plates and put in box to dry in fifteen minutes. In another fifteen minutes they are dry (using Alvord's opaque).

In looking over my old plates, I am sorry I ever made a negative without its being backed.

The ready-backed plate is, of course, most convenient for amateurs.

## INTERIOR PHOTOGRAPHY.

INTERIORS are rarely attempted by the ordinary photographer, and when they are the results, through ignorance and inexperience, are usually the reverse of encouraging. Some practical hints on the two chief branches of indoor photography, architecture and portraiture, may therefore be of interest and use to many readers.

To deal with architectural work first, says a writer in *Scraps*, the choice of view is an all-important point. Two workers of equal technical skill may visit an ordinary country church, and while one produces a series of interesting pictures the other turns out a collection of guide-book "views" of the dreariest and most eye-wearying kind. As a rule, the simpler the subject the more pleasing the result. The great mistake is to attempt too much. When a photographer enters a grand old church or cathedral he feels himself bound to make a heroic attempt to get it all on one plate. The consequence is that the perspective is terribly exaggerated and the grace of the design utterly lost. One sees a bewildering mass of detail, and two long rows of pillars tapering away to an east or west window in the far distance, apparently about a quarter of a mile off. A far better idea of the beauty of the place would be given if, instead of making this insane attempt to include the whole, the worker limited himself to a single group of pillars or a representative corner. Here he could hope to do justice to his subject; in the other case it would be impossible.

Before setting up his camera the photographer should walk round the building and carefully note likely positions, paying particular attention to the lighting. The latter is a very important point in interior photography, where extreme contrasts of light and shade are always liable to obtrude themselves unnoticed into the picture. Above all, he should be careful not to get a brilliantly lighted window in the *range of view*. This would show in the result as a detail-patch of white, and utterly ruin the photograph. For this reason, when photographing inside churches, it is generally best to choose views looking toward the north, because not only is that side better illuminated than the south, as the stronger light comes from the latter side, but the windows are far less brightly lighted, and halation is not so much to be feared.

Halation, of course, may be minimized by using backed plates, but even a backed plate is not proof, if we subject it to such a severe test as a south window in a badly lighted church with the sun or a bright cloud behind. The writer has always advocated the universal use of backed plates. There are few subjects, be they landscape, portraiture, or what you will, that do not give better results on backed than on unbacked plates. Halation is present more or less in every photograph taken on an unbacked plate, and though not apparent to the eye except in extreme cases, it none the less detracts slightly from the crispness and sparkle of the result. The makers supply their plates backed at a very slightly augmented cost, and it is certainly well worth the few extra pence to buy them and use them always.

Any ordinary camera will do for architectural interiors, provided that it be fitted with a fairly good lens and a swing-back. The last is a *sine qua non*, as there are few interiors where anything decent can be got without tilting the camera somewhat; and, of course, the swing-back has then to be called into play in order to keep the upright lines vertical. Some workers recommend a spirit-level, but the writer has only found this a distracting and irritating little

toy. Beside, one can always make certain that the camera is level by seeing that the vertical lines in the image are parallel with the sides of the focusing-screen.

If a hand camera has to be used and it has no swing-back, the only thing is to elevate it bodily, either by standing on a bench or borrowing a pair of steps, or else taking it up into a gallery or other raised position.

If the swing-back be used, care should be taken to re-focus after adjusting it, and to use a small stop in order to get the image quite sharp all over. Tilting the camera is often a very delicate performance on the polished stone floors of many of our churches and cathedrals, and the legs are as likely as not to slip away at a critical moment, provoking feelings peculiarly out of place in a sacred edifice. To remedy this carry three small pieces of cork in your pocket, and stick them on the pointed ends of the stand. Added rigidity is also given if the tripod is so adjusted to the base-board of the camera that one leg sticks out behind and the other two open in front, instead of *vice versa*, as most photographers prefer to have them when focusing.

In a dark interior focusing is extremely difficult, and a good plan is to get a friend to walk about in front with a lighted match or candle-end in his hand.

Now we come to exposure, which is the all-important point. Without going so far as to say that it is impossible to over-expose an interior, the writer may safely assert that it is very difficult so to do. Patience is a virtue in the photographer of interiors, and also in his friends, if any accompany him. Indeed, it is these non-photographic friends who come out sight-seeing with us that are responsible for a great many of our failures. A wait of half an hour or so is not at all acceptable to them, nor, if the truth be told, to the photographer himself, and he is only too glad to believe that the plate has "had long enough" and to clap on the cap.

The moral is, not to go out with non-photographic friends if you mean serious business, and also to go prepared, either with book or other amusement, for long waits. One may very profitably employ the time of waiting in getting one's notes up-to-date or in walking around looking for fresh pictures. The camera should always he protected by the focusing-cloth. There may be a slight leakage which, though not enough to make itself apparent during the few seconds which suffice for an ordinary subject, would be quite sufficient to fog the plate during an exposure of half an hour or so.

Very little advice can be given as to the exact length of exposure required, but on a fine summer's day, using $f/32$ and an ordinary plate, twenty minutes will be found about right for an average church interior. This is, of course, a very rough estimate. Dull weather is best for architectural interiors, as the contrasts of light and shade are not nearly so much accentuated.

So much for architectural work; let us now turn to indoor portraiture. The remarks on development below apply equally to both. Indoor portraiture has been responsible for some of the most hideous results that photography has ever presented to its devotees. Who, at some period of his existence, has not been haunted by one of those glaring white faces, with perhaps one side in utter darkness, with two black smudges for eyes, and a dirty streak for a mouth, the whole proudly exhibited by some enthusiastic young novice as a "photograph" actually taken in our sitting-room.

Putting flash-light aside, as not coming within the scope of this short article, we must not attempt to introduce surrounding details, such as furniture, into the picture, but must concentrate our attention on the sitter, and principally on the lighting of the face. A plain background of some neutral tint should be employed. Such a one may be easily made by hanging up a table-cloth or a few yards of drab material. One can generally find something in the house that will do, and so save any expense in the matter.

Suppose that we are working in an ordinary room lighted by one window. Care must be taken not to have the sitter too near, or there will be a very harsh light on his face. On the other hand, if too far away, the exposure becomes disproportionately long. The thing is to strike the happy medium.

Wherever the sitter is placed we shall

need a reflector of some sort—some means of diffusing the light and of evenly illuminating the face.

The distance of the sitter from the window depends on the size of the latter. With a large window he can, of course, be much further back. As a rough rule, about one and a half times the width of the window, diagonally back from the nearest corner, will be found a good distance. The sitter should be about three-quarters face to the window, and the illumination of the other quarter be left to the reflector, which may consist of a screen of white paper, of a sheet hung on a clothes-horse, or even a looking-glass.

No direct sunshine should be admitted, and the window panes should be covered with white tissue paper if the sun is shining on them at the time. The image should be very carefully examined on the screen to see that there are no undue contrasts or brilliantly lighted patches. All these would be greatly exaggerated in the result.

A large stop and rapid *backed* plates should be used. The thing is to cut down the exposure as much as possible, so as to avoid the strained appearance which people's features always assume when kept rigid for any length of time. One must, however, take care, to give a very full exposure.

To conclude, just a few words with regard to the development of interior photographs. They must be developed slowly and cautiously, with weak solutions containing the minimum of pyro. One should aim at a soft negative full of detail and gradation. It will generally be found that there is quite enough contrast present in the result, without making any special effort to produce it.

## PHOTOGRAPHERS' ASSOCIATION OF THE PACIFIC NORTHWEST.

THE second convention of this association will be held in Portland, Oregon, October 3, 4 and 5, at which it is hoped the photographers of Oregon, Washington, and Idaho will gather in good round numbers. Mr. Charles Butterworth, an old subscriber, sends the subjoined letter of information:

An organizing convention was held in this city last October (growing out of a local organization of the photographers of Portland), with an attendance of over one hundred photographers from the three States mentioned, at which were shown thirty-four exhibits by photographers and thirteen by manufacturers and dealers. At that convention, which lasted three days, was organized a tri-State association, to be known as the "Photographers' Association of the Pacific Northwest."

The officers elected for the present year are:

A. L. Jackson, Tacoma, President.

H. D. Trover, Salem, First Vice-President.

Charles Butterworth, Portland, Secretary-Treasurer.

E. L. Curtis, Seattle, Vice-President for Washington.

J. C. S. Aune, Portland, Vice-President for Oregon.

Horace C. Myers, Boise, Vice-President for Idaho.

This date was selected by the Board of Directors because at that time we can secure the exhibits from the Eastern associations. It also occurs during the time of the Industrial Exposition to be held in this city, which will make the attendance doubly attractive and desirable to all the photographers of the Pacific Northwest; and as a further advantage better transportation rates can be secured at that time.

Persons in a position to know have predicted that this will be the largest State convention ever held. From the Sound to Southern California, and from Idaho to the sea, have come promises of exhibits even before the date of the convention was known.

The meeting for this year promises to be a large and enthusiastic affair, the need of such an organization being almost universally felt among the photographers of the Great Northwest.

A list of awards to be given at the coming convention has been mailed to every

photographer in the three States, the most interesting item of which, so far as your readers are concerned, is the "Foreign Class," open to all professional photographers outside of Washington, Oregon, and Idaho, one picture—any size—to be framed as desired by exhibitor (without glass).

First award, gold medal; second award, silver medal; third award, diploma.

We respectfully ask to be placed on the visiting list with the other associations. We have selected a date for the convention which will be convenient for anyone from the East desiring to attend.

Printed matter pertaining to the association will be forwarded to all desiring it.

CHARLES BUTTERWORTH,
Secretary-Treasurer.
782 Kelley Street, Portland, Oregon.

## THE NEBRASKA CONVENTION,

### Lincoln, May 21 to 24, 1901.

THE meeting was called to order by President Lancaster. After the President's address an auditing committee was appointed. The meeting then turned itself into a social session, and a general discussion of items of interest followed. Refreshments were served during the session, a delightful surprise to all present.

The second session of the Convention met in the Art Hall of Nebraska University, the walls of which were entirely covered by exhibits, the finest display in number and excellence ever shown in Nebraska. Mayor Winnette welcomed the photographers to Lincoln, and Chancellor Andrews spoke in behalf of the University. The President responded in a short address. Communications were then read and judges appointed; various discussions followed bearing upon general business, after which the meeting then adjourned until 8 P.M., when an interesting lantern-slide exhibition was given in the Art Hall. The afternoon was devoted to paper demonstrations.

The third regular session opened with a demonstration in posing and lighting at the Hayden and Townsend studios. In the afternoon the entire convention went to Lincoln Park to participate in the field day sports which had been arranged. It was a particularly enjoyable afternoon, many of the members distinguishing themselves in feats of strength and skill.

A base ball game was played, captained by Z. T. Briggs, of Atchison, Kan., on one side, and D. E. De Putron, of Lincoln, on the other. Sid. Wells assumed the difficult position of umpire. It appeared that Mr. De Putron had chosen with greater discrimination, for at the end of the second inning the score had stood 17 to 8 in his favor, and the ball looked like a comet in its flight through the air. So the game ended, no other ball being in sight.

In the evening the convention was called to order by the President, and Miss Hayden, of the Nebraska School of Art, gave a lecture which was heard with great interest by the photographers, a vote of thanks being tendered her at the close.

After the lecture a business session followed. Treasurer Fritz reported $200 on hand. The election of officers resulted as follows:

*President:* T. M. Mackey, Superior.

*First Vice-President:* J. Leschinsky, Grand Island.

*Second Vice-President:* M. G. Stoneman, Auburn.

*Secretary:* E. R. Tyson, Nebraska City.

*Treasurer:* W. P. Fritz, Fremont.

Omaha was chosen as the next place of meeting.

At the last session, May 24th, the meeting was called to order at 10 o'clock. The reports of Auditing Committee and Committee on Resolutions were read and adopted, after which the judges' report was presented, showing the following rewards:

*Grand Portrait Class*, open to the world. Gold Medal, Elias Goldensky, Philadelphia, Pa.

*Pictures Chosen for Permanent Salon.* Tyson & Rice, Nebraska City; Heyn Studio, Omaha; J. Leschinsky, Grand

Island; Townsend, Lincoln; H. Lancaster, Omaha.

*Sweepstakes.* Loving cup, Tyson & Rice, Nebraska City.

*Standard Class.* First, Tyson & Rice, Nebraska City, gold medal. Second, M. G. Stoneman, Auburn, silver medal.

*Class A.* First, A. J. Van Lieu, York, silver medal. Second, J. M. Henderson, York, bronze medal.

*Class B.* First, John F. Wilson, Pawnee City, bronze medal. Second, H. S. Boston, David City, ribbon.

*Class C.* First, W. J. Bauer, Sutton, bronze medal. Second, R. E. Gleave, Trenton, ribbon.

*Genre.* First, A. J. Van Lieu, York, gold medal. Second, Mark's Studio, Alliance, silver medal.

*Interstate Exhibit.* H. Lancaster, Omaha, Neb.

*Class of Specialties.* First, M. G. Stoneman, Auburn, silver medal. Second, A. L. Anderson, Wahoo, bronze medal.

After awarding the prizes the retiring President, Mr. Lancaster, was presented by the Association with a gold-headed ebony cane. He responded with his usual felicity. The Convention then adjourned *sine die.* E. R. TYSON,

NEBRASKA CITY. Secretary.

## NEW ACCESSORIES.

BY WILBUR GRÜBEMAN.

IT is fairly certain, in my mind, that we shall ere long have a revival of the accessory. Not that the accessory has ever been quite out of date. Scores of the best men and many hundreds of the straight run of photographers use accessories every working day of their lives. But many photographers have discarded it—for the present, perhaps—and its more general reappearance will be brought about, no one knows exactly how, by fashion, which by an unchangeable law is never constant to one thing, but must forever oscillate between extremes.

Now, when accessories come into the studio again, what are they to be? There are three courses open. Either the dealers can send us the same old patterns and styles that they have sent since the photographic year one; or they can become up-to-date; or, finally, the photographer may obtain his own accessories, either from the furniture stores or from the carpenter. I believe that the two latter courses will be followed; the photographer will occasionally purchase some accessory not conventionally of the studio; and the manufacturing dealer will specialize on up-to-date woodwork, etc.

There are several things that should be banished for twenty years. To mention a few: the rustic stile; ditto bridge. The much-curved straw basket of artificial flowers, the vase, the palm, and the gorgeous plush upholstered chair. Personally, too, I would like to see that rough surfaced gray, imitation-stone-lichen-spotted wall and balustrade consigned to oblivion.

What would I put in their places? Well, in the case of chairs we are already on the right tack, for photographers often use considerable variety. But I would keep away from any chair that is not, at least to a certain extent, homelike. And I would avoid all *obtrusive* chairs, whether of pattern or of color. Perhaps an ideal one would be a Chippendale, one of those plain, slight pieces of work without a spare ounce of wood or an unnecessary ornament, but which are none the less graceful.

But, most of all, I would suggest that each photographer select his own accessories. A glance through WILSON'S for the past year—it is not the first time I have suggested this, for I believe in refreshing the mind with ideas—will suggest five or six. Perhaps you will scarcely call it an accessory, but Mr. Evans had a picture "The Light of Expectancy," in which a lady holds a candle which (supposedly) lights her face. This idea is as old as the hills, and we have had it in good-night (nightgown) pictures of little girls, which are much better than naked babies. There has been more than one picture in which

a mirror has been introduced, showing a reflection of the lady's face, and the lady herself photographed from behind or in profile. There is the afternoon cup of tea, and speaking of tea, when you have just the right subject for it, especially if the lady is just a wee bit elderly, why not make it real tea—if you can make it good. I venture to think that if properly done it would conjure up that pleasant look which is so often sought for in vain. If the people are really interested in games, why not let them spend five minutes at a game of chess or checkers. A writing-desk, with the lady either seated at it, or standing up, reading a paper or letter has made a very effective photograph ere now. Another thing which is no novelty is a book or newspaper, and the advantage of it, under certain conditions, in giving the person something to do, is well known. There was a very good picture of this kind which I saw recently, by a French photographer, in which the sitter—a man—was opening a huge portfolio, the back of which rested on the ground, and one of the open covers against his knee, the other being held open by his hand. It was a pose that might easily result in a bad picture, but in this case the result was very successful.

The reason I suggest these special accessories—and they are merely suggestive—is that, with one exception, they are things which cost little or nothing, and things which need not be bought solely for the studio, and this is a consideration to the country photographer. The great bane of the old-time accessory was that it cost so much and was so exclusively for the studio that it had to be used over and over again. If accessories come in again and a start is made with simple things, there will be no limit to their number—they will become as versatile as mounts are at present. And with the spirit of interchange at present among photographers there will be no lack of ideas. For in the magazines and at the conventions where work is shown the photographer will see what others are doing, and so any novelty will rapidly spread around.

The hope, then, for the accessory of the future must be away from a few stock lines. Suppose that every photographer decided (he won't, fortunately) that he would buy a mirror and go in for reflected portraits. If each one bought his mirror locally it would be better than if one stock pattern were supplied throughout the country. If we have more variety in chairs we shall have less of red plush. Similarly the oak library table will be more of an occasional. And by keeping wide-awake for new and appropriate things the accessory may become as interesting a part of the photograph as is the mount of to-day.

## PERMANENCY.

BY PAUL CLARE.

"ALL our work guaranteed permanent." Such is the trend of the statements of most photographers. I never knew a photographer who claimed that his work was *not* permanent—such a one would be a very foolish business man. But, without advocating imperfect fixation, the use of a combined bath, or any other heresy, I would like to point out, just for once, the need of ephemeralism in business—not in photographs.

A photographer, like many other business men, is sometimes rather inclined to depend too much upon past achievement, and to lose sight of correct proportions as between an effort and its results. There are many things created for temporary use—including Dewey arches and American expositions—and not the least of their advantages is that when they have fulfilled their purpose they may quietly be consigned to the dust-bin. A man or body of men desire a certain end, and they devote a certain amount of effort to its attainment. When the thing is over the account is closed—like a holiday—and remains only a memory.

The moral is that a man must be constantly doing things if he wishes to succeed. Some men occasionally produce a strong piece of work, and think that such should make them "artist photographers" for all time. Such men are not uncommon, men

whose common run of work is very weak, but who can always manage during the year to squeeze out a few "masterpieces" for the conventions. I know, to quote an extreme case, a firm whose showcase contains work done by the founder of the business, a man dead these last ten years. Such is scarcely the way to succeed, and this firm is gradually losing ground.

Too often some special effort is calculated as though it were some ball which, once set rolling, would keep going through all time—a sort of perpetual motion, in spite of friction. It would be nearer the truth to compare it with a fire. The fire blazes up, and we are warmed; the fire goes out, and there is an end of it. Continued success can only be obtained at the price of continued achievement.

It is the old, old question of settling into a rut. As a pure matter of business a certain amount of rut is a very good thing. It is possible to have *too* much enterprise in business, as many photographers must feel as they buy their mounts in dozens or fifties, because a new pattern is floated every week. It was so very much more convenient the old way, when cabinets and cartes could be ordered by the thousand; but for good or ill, conditions have changed, and we must keep pace with them.

Have you ever noticed that many men change their styles; the most conservative of men, too, change so gradually that it is scarcely noticeable—in fact, the change is a matter of years. But look at their work now as compared with ten years ago, and you will see the difference. With added practice and the gradual accumulation of ideas or wrinkles their work gradually grows.

Such is the best change for the man at the top. Even he, if he believes in permanency, believes that he has reached the finality and perfection of things, will gradually slip backward. But the smaller man, the one who finds business small in quantity, and doubtless competition keen, cannot afford to undergo such a gradual process of evolution. He must out and hustle. It is this live hustling, this keeping up-to-date, keeping out of that permanency which is but another name for a rut, that is responsible for much success. And it has more advantages than one often realizes. We are prone to think of hustling as a necessary evil, usually forced on us when a new man comes to town with his coupons, and schemes, and cut prices. *His* plan is to get all there is in it, and to that end he creates all the new trade he can, and also gets all of your trade that he can. And there is no doubt that he hurts. But the two of you get more trade out of the town than you alone did. The trouble is that two of you have to share it, and so it pans out slimmer than when you alone were working, say, three-fifths of the possibilities of the town. But the point that is overlooked is that the new man came to the town *because* he saw that extra two-fifths possible. Had you been as live before he came as you were afterward he would never have come. For a man sizes up things pretty carefully before he opens in a new town, and if he finds too much evidence of life he sheers off and tries some other place.

A few years ago a man told me he proposed to open business in Toledo. He had friends or some family reasons for wishing to go there. Twelve months afterward I met him and learned that he had opened in another large city in the same State. He told me that he had spent a week in Toledo, and decided that it would he hard to work against Summit Street.

Let the day's work count; don't depend on what has gone before, and the chances of success will be much greater than if too much trust is placed in permanency.

---

A COPY of the new and revised edition of the *Aristo Manual* reaches our table as we go to press. It is one of the most useful business booklets we have seen, and as handsome as it is useful. In its forty-eight pages the practical printer will find an inexhaustible store of plain information concerning the successful use of *Aristo* papers, including the care of trays, impurities in water, and how to remedy them, litmus papers, hydrometer tests, and all the little things which mean perfection in printing. The new papers, *Aristo Collodio Carbon* and *American Platinum*, are given extended treatment, and it is difficult to see what could be added to make the book more complete. Send to the American Aristo Company, Jamestown, N. Y., for a copy free.

# RECENT AND PROPOSED METHODS OF PHOTOGRAPHING THE SUN'S CORONA.*

THE problem of successfully photographing the outermost layer of the sun known as the corona is a very difficult one to accomplish. This is chiefly due to the fact that the brightness of the inner corona is several hundred times greater than its outward extensions. A proper time-exposure for the inner corona is entirely too short to record the fainter impressions of the outer parts The corona is visible only at the time of a total solar eclipse. The experience gained at one eclipse may not be of much advantage for gauging the time of exposure, as the brightness of the corona varies greatly at different eclipses. The same variation is true of the general sky illumination which determines the character of the background upon which to photograph. In the shorter eclipses of two minutes or less the general illumination of the sky is frequently quite bright, which is a great disadvantage.

The probable re-occurrence of an eclipse at any one locality is only once in nearly four hundred years

With the possible exception of the eclipse which occurred in the Southern States in May, 1900, total eclipses of the sun seem to have a special fondness for the less inhabited portions of the globe, so that the difficulties and cost of transportation of instruments is a very serious matter. This would not be so bad if there were a reasonable chance of the weather being clear, which is frequently not the case. Owing to the above and other difficulties, attempts have been made to photograph the corona in full sunlight. The reason the corona is not visible ordinarily is due to the illumination of the earth's atmosphere. If it were possible to get above our atmosphere, simply screening off the sun's disk would render visible the corona. The brightness of our illuminated atmosphere is over sixty times that of the corona. Dr. Huggins and others have thought it possible, by means of photography, to detect differences of illumination less than one-sixtieth of that of our atmosphere, and so obtain a picture of the corona in full sunlight. This was thought quite feasible, as the corona is much richer in ultra-violet light than the general sunlight. The photographs obtained from these experiments had an halation effect which was at first mistaken for the general outlines of the corona. Although successful results in this direction have been announced from time to time, none of them has been confirmed.

Within the last few weeks it has been announced by Deslandres that he has been able to map the outline of the corona by means of a very delicate thermometric apparatus. This, however, is not a photographic record of the corona.

The usual practice in photographing the corona is to have such an assortment of lenses, of varying focal length from a few inches up to 135 feet, such as was used in the eclipse of May, 1900, with such a variety of exposure-times, that at least some of the exposures will be correctly timed for the various parts of the corona. Negatives thus obtained show only one or rarely more special features successfully. In order to get the best results as far as the whole corona is concerned, it has been found desirable to combine the special features from each of the negatives into a composite drawing. By this means some approach has been made to the appearance of the corona, as seen by the unaided eye or as viewed through the telescope. It will thus be seen that the great desideratum is a method of controlling the exposure of the various parts of the corona.

Prof. Charles Burckhalter, of the Chabot Observatory, California, has succeeded in devising such a method of control. By means of a series of revolving diaphragms immediately in front of the plate and moving concentrically with the moon's image, it is thus possible to reduce the equivalent exposure-time of the inner corona. By this arrangement any desired increase of exposure can be given from the sun's edge outward to the end of the corona. Thus during a four-second exposure of the plate the innermost parts of the corona can be given an equivalent exposure of 0.02 of a second, so on, increasing according to the relative distance from the sun, until the outermost extensions will have the full four seconds' exposure. As the whole apparatus is under electrical control, it is simply a matter of turning a lever to the right or left, which will enable exposures to be made with an accuracy of 0.01 of a second. The resulting negatives give the finest details of the whole corona that have ever been secured on a single plate. One of the negatives obtained by this method was quite unique in that the inner corona was greatly underexposed, owing to the equivalent exposure being reduced to 0.02 of a second. A comparison of a negative taken in the usual way, without this system of controlling exposures, in the same instrument as was subsequently used with the controlling device, shows at once the great superiority of this method, in not only giving details of the inner corona, but the outermost extensions as well. But even with this arrangement there is ample opportunity to make errors in the proper exposure-times. This was the case when this method was tried in the India eclipse of 1898, when three times the proper exposure was made, giving a negative with no detail of the inner corona. If the corona was always of the same brilliancy in each eclipse the matter would be simplified.

* A paper read before the Photographic Society of Philadelphia by Howard W. DuBois.

In this connection the method of coronal photography suggested by Prof. Nipher is of considerable interest. He proposes exposing a plate to the corona long enough to obtain a positive, which is then developed in the light. The advantage of this method consists in the fact that an over-exposure in the ordinary sense is practically impossible.

In order to fully appreciate the nature of this method a brief reference will be made to the subject of the production of positives.

Positives can be made from normally exposed plates developed in the usual way in the dark-room and then subjected to a strong light. Negatives which are not completely developed reverse quicker than those fully developed. The writer has frequently completely reversed negatives into positives after they have been overdeveloped as negatives by subjecting them to the direct light of a Welsbach burner.

E. S. King, of the Harvard Observatory, has observed the reversal of negatives under similar conditions in connection with star spectra.

In some photographs sent to the writer, of the spectra of two adjacent stars, one star had all its lines reversed, while the star immediately alongside of it had only the lines of the shorter wave-length (in the violet) reversed.

The observations of Janssen, as published in the *Comptes Rendus* for 1880 and 1881, showed that the reversal of the negative produced by overexposure was of a recurrent character.

By suitable overexposure a positive is produced, whereas had it been exposed for a much longer time a second negative would have been obtained. The positives were developed, however, in the dark-room.

Prof. Nipher has called attention to the fact that as darkness is the proper condition for negative development, so is light the suitable one for positive development. The action of the development in the light simply enables a good positive to be secured with much less time-exposure than if the development were made in the dark.

When the proper exposure for a negative has been somewhat exceeded the result will be an approach to a zero condition, which we understand generally by saying that it is fogged and nothing will develop. This condition can, of course, be averted by the use of restrainers, if the overexposure is not too great.

If the overexposure has been several thousand times too great for a negative, it will pass the zero stage and begin to enter the condition of a positive. In other words, it is an underexposed positive, and what it wants is more light to help it along into the complete positive state, and hence the use of light in the process of development. In positive photography there is no danger from overexposure. It is not my intention to go into manipulative details, as Prof. Nipher has already published these, although from private correspondence I learn that he has made some improvements over his published work, to which, out of courtesy, I will not be able to refer.

The time of exposure for a well-lighted outdoor subject is from two to five minutes, which is rather long for the majority of eclipses.

The eclipse which occurred in Sumatra in May of this year was of six minutes' duration, and in that case it was desirable to take several photographs with the same instrument.

Prof. Nipher's treatment of plates is not confined to positives, but negatives many hundreds of times overexposed can be successfully developed as negatives in the dark-room. This is a distinct advantage and will be of great service in preventing the loss of plates (negatives) exposed in the ordinary way to the corona.

The great desideratum in this positive work is to reduce the time of exposure. In this line of experimentation the writer has been mostly interested. The plan of investigation is to give the plate greatly reduced exposures for positive work, then trying to make up this deficiency of exposure by such subsequent treatment in various ways, that the action on the plate will be similar to the action of light.

A very interesting line of investigation is to subject such an underexposed plate to the influence of such radio-active substances as uranium, polonium, radium, and actinium. Such substances will produce radiographs of objects in the dark, by the emission of the so-called Becquerel rays. These substances do not act by virtue of direct chemical action on the plate, but by invisible radiations which penetrate the great majority of substances.

The theory of the action of these substances is to carry along the light impression which the plate has already received to such a state that a satisfactory positive can be obtained. The action is, of course, much more gradual than in the case of the production of positives from negatives, upon which light is allowed to fall during the process of development.

The researches of Abney have shown that the reversal of a negative is connected with the oxidation of the image. The treatment of the plate subsequent to exposure to the influence of oxidizing solutions such as potassium permanganate and potassium bichromate serve to reduce the time of exposure somewhat.

A variation of the above oxidizing treatment is to subject the plate to the emanations from fresh surfaces of zinc, magnesium, and other metals. These emanations will also produce photographs of objects in the dark. This action has been found recently, by Russell, to be due to the formation of hydrogen peroxide. Consequently it is much more convenient to employ weak solutions of hydrogen peroxide in water to produce the same effects. The experiments in this direction are not entirely completed, but the results will be communicated in the near future.

Through the courtesy of Dr. S. P. Langley, Secretary of the Smithsonian Institution, I am enabled to

show two slides which were taken during the eclipse of May, 1900, according to the ordinary methods, but with an instrument of extraordinary size. The lens was twelve inches in diameter, having a focal length of one hundred and thirty-five feet. This gave an image of the sun at the focal plane of fifteen inches in diameter. The telescope was mounted horizontally and the light from the corona was reflected into it by means of an instrument called a Siderostat, the function of which is to counteract the motion due to the rotation of the earth, thus keeping the image stationary on the plate during the exposure of sixteen seconds. One of these photographs shows the polar streamers very distinctly, although the inner corona is overexposed. The other photograph shows the large prominences, extending many thousands of miles beyond the main body of the sun.

The lantern-slides which are now shown are direct positives made without the usual intervening negative, by contact printing, as well as direct outdoor exposures. The development was made both in sunlight and by the light of a Welsbach burner. The reversal of the image does not leave the film perfectly transparent, which is specially noticed in pictures having a good amount of sky in them.

In the process of the reversal from the negative to the positive, absolute chemical equilibrium does not seem to be established, and there results the slight veiling of the film noticeable only in high-lights, which, however, does not affect the most minute details of the picture. When the electric lantern is used this slight veiling is not noticed.

The subject of positive photography is highly interesting from a scientific stand-point; whether it will make any change in ordinary photographic practice remains to be seen. There is a possibility that it may prove the practical method for photographing the corona in full sunlight. The photographing of the stars in full sunlight is another very interesting possibility.

# EDITOR'S TABLE.

WE hear from Mr. JOHN CARBUTT that his new orthochromatic plate has met with remarkable success, and that he has been unusually busy all summer keeping his output equal to the demand from consumers direct and from the trade. CARBUTT'S single-coated plates with Columbian backing, for all work where halation is present, are also enjoying a larger popularity than ever. In these two specialties Mr. CARBUTT has two sure winners, and we are glad to hear of his success with them. Send for his circulars of information.

---

ALVORD'S opaque, made by the ALVORD MANUFACTURING CO., Detroit, Mich., is introduced in good time to meet the requirements of amateurs and professionals who appreciate the value of backed as against unbacked plates. A sample jar of Alvord's opaque, obtainable for 50 cents, will supply the average worker's needs for many months and prove itself an indispensable convenience.

---

A VERY useful set of liquid colors, for spotting or tinting photographs, prints, etc., has been placed on the market by L. M. PRINCE & BRO., Cincinnati. We have given these colors, known as *Aristo tint*, a careful trial and can recommend them as superior to many similar specialties which are more expensive.

---

*The Photo-Miniature* keeps up its supply of useful monographs on the various branches of photographic work. The June number offers an interesting little book on *Pinhole Photography*, the simplest and most practical account we have seen of photography without a lens. The illustrations are surprisingly good and tempt us to forget the significant fact that they were made with a needlehole in place of the lens.

---

READERS on the lookout for bargains should write to RALPH J. GOLSEN, 82 Wabash Ave., Chicago, for a copy of the June *Photo-Pivot* and his new "Bargain List of Views and Portrait Outfits."

---

LLOYD'S *Photographic Encyclopædia*, 1901, has just reached our table, and more than fulfils the expectations awakened by the generous good quality of last year's volume. The *Encyclopædia* contains over 400 pages of photographic information, several special articles by experts, a book list of 150 of the best photographic books, and a handy guide to photography. 20 cents (to cover postage) sent to A. J. LLOYD & CO., 325 Washington St., Boston, will secure a copy.

---

AMONG our visitors during the past month we were glad to welcome Mr. N. C. HAWKS, of San Francisco, and Mr. E. LEWELLIN WHITE, of London, both intent on the forwarding of their respective business interests in this section of the country.

Mr. N. C. HAWKS is an old friend and an enthusiastic reader of these pages for many years. Although interested in photography only as an amateur and dealer, Mr. HAWKS was outspoken in his testimony to the usefulness of our MAGAZINE. We are pleased to know that *Polychrome*, the development paper in-

troduced by Mr. HAWKS a year or two ago, has been very successful in the West, and will shortly be introduced to Eastern buyers. *Polychrome* is simple in manipulation, and gives prints closely resembling high-class engravings. Mr. HAWKS showed us many fine examples of the practical possibilities of *Polychrome*, especially in portraiture.

Mr. E. LEWELLIN WHITE is the managing director of the PHOTOCHROM CO., LTD., London, whose photographs of foreign scenes, printed in color, have delighted thousands of American tourists for some years. Mr. WHITE'S object in visiting America is to make the necessary arrangements for the location and operation here of the new dry-plate factory of the LUMIÈRE NORTH AMERICAN CO., a company recently formed to introduce the famous Lumière plates and specialties to American and English photographers. The new company is very confident of the quality of its product, and has ample capital for its introduction here, so that we may anticipate a lively time in the dry-plate business at an early date.

---

AN attractive competition, with $610 in cash and goods as prizes, is announced by "Rotograph," 101 Fifth Ave., New York. The object of this competition is to familiarize amateur and professional photographers with the virtues of "Rotograph" bromide paper, and the liberal prize list should help the manufacturers to gain this purpose. Our space will not permit the printing here of the conditions of competition and awards offered, but these can be obtained by sending a postal-card to the "ROTOGRAPH" CO. The competition closes on November 15th. The judges in the competition are Messrs. B. J. FALK, E. B. CORE, F. DUNDAS TODD, ALFRED STEIGLITZ, and JOHN A. TENNANT.

---

*The Photographic Chronicle* is a new semi-monthly publication, received from DEAN & CO., LTD., London; edited by Mr. JOHN A. RANDALL. The first number contains many useful papers and the *Chronicle* promises much usefulness to its readers.

---

THE American School of Art and Photography, of Scranton, Pa., is a new claimant for public favor among the increasing number of photographic schools, with the important difference that it teaches only by correspondence. Courses are offered in all branches of professional and amateur photography, and the school would seem to be adapted to meet the requirements of its field. Mr. J. B. SCHRIEVER is the president of the institution, and will be glad to forward the school booklet on request.

---

MR. CHARLES R. PANCOAST, 1215 Filbert St., Philadelphia, sends us a useful little pocket record for exposures which he has issued as an advertisement of his business. A two-cent stamp will bring a copy to any of our readers desiring it. Mr. PANCOAST is well known in the East as an expert photographer, and we commend his services with pleasure.

---

THE BAUSCH & LOMB OPTICAL CO, Rochester, N. Y., announce an interesting contest for users of their new Plastigmat lens. Unfortunately the competition closes July 20th, so that it would be useless to give particulars at this late date. The new lens, however, is one about which our readers will do well to be informed. Its practical utility is being excellently demonstrated in the special insert found among our advertising pages month by month.

---

FOR reasons unknown, the Executive Committee of the P. A. of A. have this year made no public announcement of the educational features of the forthcoming convention. That the course of instruction to be provided will be practical and of everyday helpfulness is evident from the only two special features of which we have heard mention. One of these is a talk on the pictorial side of portraiture, by Mr. PIRIE MACDONALE; the other is an address on photographic chemistry, by Mr. MILTON D. PUNNETT.

---

OUR August issue will be a specially illustrated number of unusual interest, and will contain many reproductions of examples of portraiture by a well-known English photographer recently established in New York. It is good now and again to refresh ourself by examining the work of new men, and from this point of view our August number will be one of the best we have published during the year.

---

WE are glad to note the increasing sale of Miss EMERY'S *How to Enjoy Pictures*, the special agency for which we took up some months ago in the interests of our readers. It is a most valuable book for the operator desiring to acquaint himself with the most instructive examples of the world's art, and we would like to see a copy in the hands of every American photographer. Apart from its usefulness as a text-book, the work is a most attractive volume for the reception-room table.

---

THE July issue of *The Photogram* (SPON & CHAMBERLAIN, New York; 15 cents) has many illustrated papers of more than ordinary interest. One of these, on "Photographing Machinery," we reprint in our August issue. Other articles deal with: "A Book by Rudolph Eickemeyer," "The Display of Specimens," "The Action of Electric Sparks," "Photo-optics Made Plain," "Improving Bad Negatives," "Silhouettes," "Intensifying with Mercury," etc.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Manufacturers of

# IMOGEN, Patented

## The Latest Novelty in Developers

Can be obtained of all dealers

| Prices: | 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|---|
| | $ —.37 | 1.20 | 2.10 | 3.95 |

**IMOGEN** is **particularly adapted** to the **modern highly sensitive plates.**

**IMOGEN** works **clearly** and **brilliantly.**

**IMOGEN** produces all the **gradation, from density to fine detail,** the resulting negatives being therefore of **the highest grade.**

**IMOGEN** is not much **affected by ordinary variations** in **temperature.**

**IMOGEN** does **not injure** the **fingers.**

**IMOGEN** answers very well for **"stand-development,"**

**IMOGEN** " **for development of lantern slides,**

**IMOGEN** " " " **of diapositives on gelatino-bromide plates,**

**IMOGEN** " " " **of bromide papers, etc.**

## Pamphlet on Developers (2d edition 1900)

containing in 20 pages detailed description and instructions for use.

**Free on application**

through all dealers or through the following importers:

**E. & H. T. ANTHONY & CO.,**
122 & 124 Fifth Avenue, 17th and 18th Streets, NEW YORK.

**MALLINCKRODT CHEMICAL WORKS,**
ST. LOUIS, MO., and 90 William Street, NEW YORK.

**THE SCOVILL & ADAMS CO., OF NEW YORK,**
3 & 5 West 19th Street, NEW YORK.

**UNITED STATES PHOTOGRAPHIC SUPPLY CO.,**
57 East 9th Street, NEW YORK.

Eikonogen. Amidol.

Rodinal. Diogen.

**Universal Exhibition, Paris, 1900. Gold Medal.**

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

FA 6615.545

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 536.
AUGUST, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

THE MAKING OF A BIG BUSINESS . . . 281
AMERICAN COMPETITION . . . 283
UNDER THE SKYLIGHT . . . 284
SHORT, MEDIUM, AND LONG FOCUS LENSES. By R. C. Ryan . . . 285
SEPIA TONES ON BROMIDE PAPER . . . 288
PHOTOGRAPHING MACHINERY. By Photo-Loco . . . 289
LIVING ACCESSORIES. By Wilbur Grubeman . . . 290
HASTE . . . 291
PROFESSIONAL PHOTOGRAPHY—NOT PORTRAITURE . . . 293
STUDIO ACCESSORIES . . . 294
NOTES: CURIOUS AND INTERESTING . . . 295
LANGFIER—PORTRAITIST . . . 313
PHOTOGRAPHY AT THE ST. LOUIS WORLD'S FAIR . . . 314
INSIDE THE STUDIO. By C. Barnes . . . 315
FINISHING PLATINOTYPE PRINTS. By M. P. Bell . . . 316
AMERICAN PROFESSIONAL PHOTOGRAPHY. By A. Lockett . . . 318
WHEN TO USE A COLOR SCREEN . . . 320
BROMIDE PAPER. By George Lovell . . . 322
DRESS AND DRAPERY IN PHOTOGRAPHY. By John Bartlett . . . 323
MOUNTING PHOTOGRAPHS ON GLASS . . . 326
A PRINTING DODGE. By F. Stanard . . . 327
EDITOR'S TABLE . . . 328

OUR PICTURES:

"Queen of Night." Engraved from a Portrait Made by Gaslight, by Langfier, New York.
Sixteen Engravings from Portraits by Langfier.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

There are many photographic journals; some of them are better—more useful—than others. But no photographic journal published gives the practical photographer so much new and useful information about his daily work—its methods and manipulation, its business and its artistic possibilities as WILSON'S PHOTOGRAPHIC MAGAZINE. Take this number as a practical demonstration; compare it with any photographic paper published anywhere, and you will agree that WILSON'S is incontestably the best of trade journals for the photographer who wants to know and to grow.

Three dollars paid in advance will bring you twelve numbers of the *Magazine* as good as this. Where can you get better value for your money? One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON

287 Fourth Ave., New York

QUEEN OF NIGHT
By Langfier, New York

# [illegible]

# PHOTOGRAPHIC [illegible]

[illegible]

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. AUGUST, 1901. No. 536.

## THE MAKING OF A BIG BUSINESS.

PROBABLY photography was never so prosperous as it is to-day—not even in the much vaunted past, when single prints fetched several dollars. And yet however much good times are in evidence, there are —must be—always some who feel the stringency of things. A photographic editor is ever receiving letters from readers who have not been able to find the key to success, and naturally they think there is a fault or a miss somewhere, and that it is not in themselves. To a certain extent they are, some of them, right. There may be local circumstances which tell against a man, just so surely as in other cases the conditions are favorable.

"There is nothing succeeds like success," but that is but added bitterness to the unsuccessful one. There are many men in small towns and villages who never get any money ahead, and who when hard times come, find the hard times to be very real. Unfortunately (and it is a thing that an editor feels keenly, when hopefully asked for advice) there is no easy way out of tight places. Energy is the only thing —or rather energy is the essential backing thing—which will work the miracle.

First, a word as to what is a "big" business. The word is one suggested by our correspondents rather than by ourselves, for it is a fact not always realized by them that the businesses they speak of so enviously are sometimes anything but big.

People are not unknown, even among those included in the magic words "Fifth Avenue Photographers," who employ as small a staff as many a struggling photographer whose assistants are limited to one or two members of his own family. The big business men are many of them never heard of outside their own cities. There are big businesses not only in New York, but in Boston, Philadelphia, Chicago, Pittsburg and other cities—businesses quite unknown, yet doing a turnover infinitely larger than that of many a well-known man. What is meant is what Mr. Clare has termed "individual" photographers; those who have made their business by a strong personality in the photographic end as much as in the business end. Now, to speak of the big business for a moment, we have said that many of the biggest are the least known. They usually owe their position to two things—capital and energy. In their own cities they are quietly and consistently pushing after business. Even if they never go for general publicity on hoardings or in newspaper columns they may none the less be working in those circles from which they can reasonably expect to draw custom.

But the general run of photographer does not taste the advantages of capital. And it is from this general run, which furnishes those who write inquiringly to an editor, that the successful men are drawn. And it is this fact of having been "through the mill" that ever makes them ready to tell what they can toward helping others along. And it is because their example may be followed by those who are not blessed with capital that editors describe their work and their methods.

There is nothing occult or mysterious in a large city; some workers seem to think that the larger the city the more chance there must be to find an unoccupied niche. If there is any choice in such matters probably it is against, rather than in favor of, the large city. It may at least be said that

the proper place to commence the road to success is where a man now is. The successful man usually changes because he has *outgrown* a place; not because it has starved him out. He makes his success up to the limit of the place's possibilities before he reaches after the larger.

The difference is not so much between big and little businesses as between successful and unsuccessful ones. It is very difficult for the unsuccessful man to grasp this. He dreams that the other man has better lenses or more equipment, a capable operator or a new style of skylight. These imaginations are often wide of the mark, and the success is but the logical outcome of hard thought and hard work—backed by an aggressive business energy.

There is one hard fact which should be grasped by everyone who wants to get among the successful businesses, and that is that things were never as prosperous as they are now, and may never, in our lifetime, be more prosperous. The deduction is that right now is the time to start ahead; there must be no waiting till harvest is over or until the winter season commences; there must be no waiting "for something to turn up." How is the progress to be commenced? That depends on individual conditions; but one thing is a primary certainty, the work must be good—work that will appeal to people as being good, and draw repeat orders and new customers. The work must be put before the people. This means advertising in every way that seems to be suited to local conditions. Advertising, remember, is not *merely* a matter of spending money for printer's ink. Much advertising, both in newspapers and circulars, is so much money wasted, because the advertiser has not thought out the wording of his announcement. And sometimes an advertisement may be obtained without the cost of a penny if a man is wide-awake and alert. Good business management is a necessity—and many photographers are bad business men. All have felt, at some time or another, the shortcomings of assistants. But few realize that there may be similar—or other—shortcomings in themselves. There is a tremendous drain of waste in many businesses—plates needlessly exposed, spoilt prints, over-persuasion when the drummer calls, leading to over-stocking. When the work is right then prices should go to a self-respecting figure. And everything should be done to *deserve* success.

"But," it may be said, "everybody cannot reach the top." That is true; but still there is always room a little ahead for the man who likes to climb up to it. We have too few leaders—the more the better, for themselves and for photography. And there is another aspect of the case which should not be lost sight of. The reward of the successful man is not solely a money one; there is a very real satisfaction in the mere producing of good work, and the more the work improves the greater is the craftsman's delight in it. And congenial work is a very pleasant thing. There may be such a thing as very much improved work and very little improved income. We meet many men, and have more correspondents, and among them we know not a few who are chafing against very circumscribed surroundings, and looking in vain for the larger field. Still, even in these cases, the time has been well spent, and the photographer's pleasure in his work has been enhanced—chronic growling has been changed to divine discontent. But this is seldom finality; the discontent is a necessary stage in the step to a wider field; and sooner or later, in some of the cases, the opportunity will come—or be made—and there will, from time to time, be new names added to the "men that are."

---

*Does Backing Decrease Speed?*—The editor of *The British Journal* has investigated this matter, and arrived at the conclusion that there is absolutely no truth in the statement. He cut a half-plate into two, backed one-half of the piece, and exposed the backed portion under a Warnerke sensitometer to the light of a naked gas flame, burning at a constant pressure, for exactly one minute. He immediately exposed the unbacked half in an exactly similar manner, and for the same length of time. After developing in a normal pyro-soda solution for four minutes at a temperature of 60° F., the results were carefully examined, and found to be absolutely identical as regards the sensitiveness. Duplicate experiments were made with precisely the same results, so that the question may be regarded as practically settled.

# AMERICAN COMPETITION.

THE question of American competition, says the *Photographic Chronicle*, is agitating the industrial world to its remotest corners. From counting-house to workshop, the American and his methods and manufactures are at present the one theme of discussion. Photography has long been invaded by our Transatlantic rival, but not until recently has the iron grip of the invader been felt and the true inwardness of American methods been clearly manifest.

### BUSINESS METHODS.

In comparison with British methods of trade, the most prominent feature of the American system is its aggressiveness. It is also moved by ambition, and imagination is pressed into the service. Advertising has been reduced to a science and an art, the most ingenious plans being devised to bring their goods under the notice of the world and to impress every likely customer. They do not sit at home in the shop, waiting for buyers, but go out into the streets and market-places to proclaim their goods. Distasteful as these methods may be to the old-fashioned British trader, it cannot be questioned that they are everywhere successful, and that the waiting policy is beaten in the competition for orders. This struggle to be always at the front, to be everywhere in evidence, could not be thoroughly carried out unless the management of the commercial part of their business was along similar lines. The typewriter, the cash-register, and like contrivances of American origin are all designed to aid this aggressive policy, to simplify advertising and the distribution of their manufactures. To adopt, in short, any mechanical aid leading to increased promptitude and dispatch.

### WORKSHOP MANAGEMENT.

The same principle that guides them in the office and counting-house is followed in workshop and factory. Workshop management, cost keeping, cost of labor, etc., are only now being studied after American models by British manufacturers. The American employers give the closest attention to the economic details of manufacture, the cost of production, wages, and material; they were the first to seize upon the subdivision of labor as a means of increasing the productive powers of workmen. American clocks were so produced, and in consequence the British manufacturers could not possibly produce at the same price work of equal value. The Kodak camera is another example of good workmanship, combined with a low price. These cameras pass through many hands. Being made in parts, cost of production is thus at its lowest, and a maker employing workmen to cut out and finish cameras throughout could not produce them either so cheaply or so quickly.

### AMERICAN WORK.

In contrasting American with British workmanship we have no hesitation in stating that the British is far superior for quality, finish, and all-round excellence. The American pays more attention to the purpose for which an article is intended. That is to say, he adapts accurately his work to its use. British articles are noted for solidity of workmanship and capacity to wear; everything being subordinated to strength to make the article withstand stress and strain. Yankee goods, on the other hand, are constructed to bear only such wear and tear as will probably fall to the lot of the article, disregarding the accidental and excessive. The Kokak is an example. It is sufficiently substantial to stand ordinary usage, and, although very near, it is not so lightly made as to be flimsy. Compare the Kodak with the old hand camera of British make. These were copied from the solid studio camera made to never wear out, containing a surplus of material and work much in excess of the needs of the case. What chance had these heavy, solid cameras, although better made, in competition with the compact, light, and just sufficiently strong American hand camera? In these adaptations the Americans evince great judgment. Others who depart from the solid British type go to the opposite extreme, producing articles which are too light even to sustain the most moderate wear. This faculty, possessed by Americans, of adapting an article with a

view to its probable usage is one of the strongest points in their favor.

PATENTS AND MACHINERY.

The patent laws of America have several advantages over those of England. The cost of patenting is less, and a preliminary search in respect to originality gives, in some degree, a better title in American patents. It is said, too, that while in England the patentee meets with great discouragement, in America he is encouraged and looked upon as a public benefactor. Apart from this, however, the Yankee not only produces a large number of original inventions, but is also very expert in putting them on the market and creating a demand, no small matter. He also uses them himself. The employer of labor is likewise fully alive to the advantages of labor-saving devices, recognizing that a machine is of as great importance in production as the mechanic. He is of the most progressive nature, does not cling to old methods simply because they are old, but is ready to give a trial at least to anything promising to save labor, cheapen the cost of production, make labor more efficient, or to turn out more work in a shorter time. Another thing the American is very quick to seize upon is a new demand, and to find means of meeting it. The hand camera demand is an illustration. The American instantly recognized the need for a camera to meet changing conditions. Contrasted with previous cameras, the Kodak seemed but a toy, and, in fact, was so regarded by professionals. Yankee cuteness saw something more in it than in a toy, and, being untrammelled by traditional ideas, supplied an article departing from current notions, yet designed to meet the wants of a class, then small, but which has grown to the magnitude of its present proportions.

## UNDER THE SKYLIGHT.

We are perhaps a little inclined to look at the portrait of a customer from our own stand-point rather than from theirs; and when they do not appreciate what we do, we say that the worse the work is the better it is liked.

The average sitter knows and cares nothing as to the technical details of the lighting, and as little as to whether the picture be a thing of art in the matter of posing. The desire is to obtain a pleasing likeness and a pleasant expression. And it is on the operator's success in obtaining these that much of success hinges.

A glance at any dozen showcases will show how much this matter is neglected; it is one that it is difficult to write about, for so much depends on the individuality of the photographer. And very often he has the very real fault of being unable to think of the sitting from the sitter's point of view.

In spite of the universality of the amateur and a wide-spread acquaintance with the superficial elements of photography, we have not yet, unfortunately, reached that stage where the sitter can come to the studio without considerable forethought and preparation, or even without a certain degree of apprehension. All this forethought is working directly against the wishes of the photographer, and it must be his mission to restore equanimity to the sitter. To this end skylight procedure should be as much divorced from business as possible. The business details, price, styles, payment, etc., may have been arranged in the office or reception-room; but all the rules must vanish at the curtain opening on the studio. How easy it is to write it—how commonplace the advice seems—that a courteous manner is essential in receiving sitters. Look at it as you will, so much hangs on that vital factor, the personality of the photographer himself.

The first attention of the photographer should be to set the sitters at ease with themselves in their new surroundings. It is quite possible, by a courteous greeting and by a few moments' quiet conversation on some subject of local or topical interest, to let our sitters feel that the photographer has a genuine interest in their presence and their patronage, and that his best attention and service are being devoted to making them feel quite comfortable. It is very often a mistake to *force* matters.

There are some people who like to be taken by storm—to whom one has to be as "one of the boys"—but not too obtrusive is oftenest best. This is especially the case with children, who almost invariably give a few minutes' consideration before "making friends."

As far as possible everything should be in readiness before the sitting commences, and the general arrangement, the lighting, pose, etc., and the size of the picture, so that the camera need not be wheeled around, should be decided on.

At the critical moment of exposure the sitter should, as far as possible, be led to forget the cause of the visit. The conversation can often be turned to some subject of interest, and the sitter given a look of animation which can be held for the few moments of exposure.

With very nervous sitters the tense moment of exposure is very trying. In this case some photographers make the mistake of rushing things. Abundance of rest between the exposures is often the safer plan. Let the sitter feel that you understand and sympathize with the strangeness of the position. A few words on the difficulty of feeling at ease will often cause a lady to smile gratefully and give the opportunity for an exposure.

One of the attributes of the successful photographer is that priceless one of being able to communicate his manner to the sitter. Some workers have a sort of infectious affability which has an unconscious reflection in the sitter and seems to banish any unpleasant feeling of restraint. This is a natural gift to some people; but those who have it not may, with care, acquire it.

## SHORT, MEDIUM, AND LONG FOCUS LENSES.

BY R. C. RYAN.

THE matter of lenses of different focal length can hardly be discussed without going into the details of apparatus used in connection with them.

To get the best results under the various conditions that one has to photograph means that every advantage must be taken of the various qualities that the modern lens offers; its rapidity, anastigmatic properties, option of employing one of its components, or the combination of focal length that shall include the angle best suited to the picture.

How often do we hear the advice given, "Enlarge up this or that portion of the negative," and, "What a pity you took that horse end on!" "Yes! but I had to get the face of the rider and to include the person he was talking to! If I had only known what the result would be I would have used the single combination of my lens; I fear I shall never get another opportunity of taking another of the same subject. I *am* sorry! I will never use a short focus again in a hand camera, though it does give splendid depth of focus, and I hardly ever have a failure. Always sharp all over, from the stones in the foreground to infinity!

Faults! faults! but where is the remedy? Sell that wide angle "pet" and look through the advertisement pages for one of the up-to-date sort, and do better work in future.

Leave the wide-angle lens to our friends the architectural experts, and the "man who must get everything in."

The most popular camera of the day is of the "all-round" hand or stand, ever-ready type, with sufficient extension to admit the use of lenses of various foci; and in the matter of size of plate, the largest consistent with the requirements of a hand camera is undoubtedly 5 by 4 inches.

Workers who are accustomed to judge distances correctly when using the engraved scale with the normal or shortest focus of the lens, find themselves hopelessly at fault when employing the half or single combination where near objects, such as portraits, groups, or figures, are under treatment. For the ambitious or precise worker no system answers his requirements like that of the reflector principle, with a full-sized focusing finder, and an effective hood to cut off extraneous light.

No photographer can afford to ignore

the valuable aid in picture-making the distribution of focus gives; a careful look through a few dozen prints will convince the most skeptical of the importance of this factor, and generally the worker will be heard to exclaim, "I wish I had set the focus to this or that distance," or in the case of under-exposure, "Why did I stop the lens down so much?"

Pictorial workers have long recognized the fallacy of using small stops except to get a fair amount of depth and covering power when using plates of large size.

The accepted standard of focal length of lens for any sized plate is taken from the diagonal line, 8 in. for half-plate, 6 in. for 5 by 4, and 5 in. for the modest quarter, that is as a minimum, but no limit is fixed as the *maximum*, this being often governed by the subject itself, and often by the limit of the camera extension. The value of the telephoto lens in the correct rendering of planes in a photograph has long been admitted, consequently this must influence picture makers to use the longest possible focus of lens that the subject and conditions permit.

The reader will perhaps exclaim, "But this renders hand-camera work so much more difficult!" Perhaps this is so; but at the same time it completely removes the possibility of distortion in the finished picture, and though the necessity arises for a finder that permits of the image being properly focused, when full advantage of being able to view the picture the right way up is properly appreciated it will prove to be a blessing in disguise, even though you have to give up beer, 'baccy, and skittles for a whole year.

The twin-lens camera has never "caught on" with the great majority of us, and the reason is not far to seek, its bulk, weight, and cost, compared with its single lens sister, is not favorable to the former. Another objection is that the finder and the plate do not give identical images; it is obvious that both lenses cannot occupy the same position, the result of this being most noticeable when taking near objects; no amount of after treatment will put the missing portions of a figure in the negative. These cameras are designed, as a rule, to take horizontal pictures only, another drawback.

No such defect exists in the "one lens" system, such as the "Adams Reflex," "Gambier Bolton's," "Shew's," the "Miral," "Phœnix," Dallmeyer's "Naturalist's," etc., the latter being specially designed for use with a telephoto lens, but is not fitted with a *full*-sized focusing finder; the first two are also adapted for use with the same lens, the others with the new type of telephoto lens, to which I shall refer presently.

Much has lately been written on the subject of fast shutter work, and one writer, posing as an authority on the subject of motion and "sich things," tells us that our eyes are falsely educated by paintings and drawings, and that we cannot detect the so-called natural positions that photographs give us. Personally, I think that our eyes do not only give the unnatural position, but the whole series superimposed, making up the whole of the movement that goes on while the object is in the field of vision; it is the recognized custom of photographers to make their selection of the positions they wish to photograph of objects in rapid flight, and although they do not always succeed, they generally get the approximate position with slight variation.

The subject of fast shutter work has always possessed a peculiar fascination for me, and I have come to the conclusion, after following the subject for five or six years, that no photograph of a fast moving object is worth a button that does not convey a feeling of motion with it, and to attain this it is only an arrangement of lines that will suggest this desirable quality, and that it does not depend upon the rate of speed, extreme or otherwise, at which the object is moving.

Lack of balance in a figure study will often convey a falling sensation, and a portrait placed too high in the frame will look as if it would fall out of it altogether.

Art *is* art, and the artist who can suggest it in the fullest sense of the word by means of his photograph possesses a modicum of that divine afflatus.

The question of the shutter is one that demands close scrutiny as to pattern, speed, position, and materials used in its construction; and in regard to the best position of it when in use, the general consensus of

opinion among opticians is that it should take the form of an iris and work between the combinations of the lens in the same plane as the diaphragm to secure the best results of the lens system. Certainly, this type has much to recommend it; it is small, well protected, has a fair range of speed, and never raises a dust in the camera in action. But the shutter that will satisfy the most fastidious and careful worker is, in my opinion, none other than the Adams' patent focal plane shutter, used in combination with a mirror as fitted to their "Reflex;" this entirely overcomes the two drawbacks to focal plane shutters as previously constructed, namely, the distortion of moving objects, and the difficult method of altering the slit aperture. In types other than this it has been necessary to lessen the tension of the driving spring to obtain slow exposures by making the slit travel slowly down the plate; in the Adams' pattern the driving spring is always working at full tension, and the different speeds are obtained by varying the slit aperture, which opens to the full size of the plate when making an exposure of one-tenth second, or for time exposure, the speed ranging as high as one-thousandth part of a second; the speed can be altered from the outside by turning a knob. The variation is easily ascertained by scale, and can be done with the plate in position ready for exposure, which is made immediately the silent and non-vibrating mirror flies into a horizontal position at the top of the camera, the shutter being simultaneously released by this movement, smoothness and noiselessness characterizing the double motion. The camera is, of course, flooded with light at the moment of making the exposure, and when the questions of reflections is considered, the shielding properties of the focal plane shutter are obvious.

The growing demand for lenses of long focus and of the telephoto pattern has stimulated the efforts of opticians who cater for photographers, and the result is that two new lenses of the latter type have made their appearance this year, specially designed for use with hand cameras, without any of the restrictions that formerly existed. I refer to the "Bausch and Lomb" and the "Dallmeyer" "Adon" negative attachment. Especially careful focusing is necessary with telephoto lenses, and the focusing finder is again to the fore; a spot of clear glass in the screen will enable this to be done with ease and precision, and can easily be made by putting a small square of glass as used for microscopic slides, and fixed into position with Canada balsam to the rough side; a focusing glass may be employed with advantage also.

If everything is carefully thought out the possessor of a camera of the "Reflex" pattern need hardly carry a tripod even for the most careful work, except on the very darkest days of the year, it being possible to give exposure as slow as one-fifth second (approximately) by first opening the slit aperture to the fullest extent, and using the mirror to close it by pressing the button.

For all round work I plump for lenses of medium focal length, preferably of the convertible sort working at an aperture of not less than $f/6.3$, the single combination of which would work at $f/12.5$. No *single* lens possesses the anastigmatic qualities of the "Zeiss-Satz," this being rapid enough for most subjects when the light is good, and the shutter working not faster than one-fortieth second.

I can hardly close these remarks, taken at random, without referring to the subject of view-finders again. In their general form they are more or less an imperfect guide, and except in one form of hand camera do not correspond with the change of view when the rising front is in use; this is a great drawback again, as this movement is a *sine qua non* in any form of stand or hand camera.

Dr. Mercer's invention, the "Inconoscope," is perfect in itself; it is made for use with lenses of different foci, and to include the same angle in each case; the image is seen the right way up, and is not reversed. What a pity we cannot focus with it.—*Amateur Photographer* (London).

---

*A New Reducer.*—A. Permanganate of potassium, 20 per cent. solution. B. Sulphuric acid, 20 per cent. solution. Take of A half a drachm, and of B one drachm, and add 8 ounces of water. If there is too much permanganate, and too little sulphuric acid, a deep stain is produced.

## SEPIA TONES ON BROMIDE PAPER.

THE demand for other tones in photographic pictures than the brown to which we have so long been accustomed, that in common parlance it has received the name of "photographic brown," is becoming more and more general. Silver bromide papers certainly give a variety of other shades from gray to black. But these tones, especially for portraits, and studies, often seem to be too cold; a warmer tone is more desirable. Sepia-brown is the present favorite for this purpose, and it is beside a decidedly artistic tone. The method of obtaining these tones, says a writer in *Photo Chronik*, is extremely simple, the necessary chemicals—alum and hypo—being always at hand. It is, of course, equally suitable for enlargements or for contact prints. It is only necessary, to obtain a good result, that the negative should be full of contrast. From a flat negative it is impossible to get a good sepia print. The reason for this is to be found partly in the color itself. The contrast between the lights and shadows of a picture is always less than with the black range of tones. The second reason why a negative rich in contrast is necessary, is that the print to be produced in sepia tones must be considerably over-exposed. The more exposure given the more will the picture assume a yellowish-brown, as with a shorter exposure the tones become darker; with normal or under-exposure the toning process becomes a failure. Moreover, not only over-exposure, but also over-development is necessary for the production of a beautiful sepia picture, and the degree of this over-development must be regulated by the age of the toning-bath to be used. The most suitable developer is amidol:

| | |
|---|---|
| Water | 40 parts. |
| Amidol | 1 part. |
| Sodium Sulphite | 10 parts. |

When possible, the use of potassium bromide should be avoided, or only a very limited quantity used when absolutely necessary. With other developers—*e. g.*, metol, hydroquinone, and iron, such good results cannot be obtained. The prints must be fixed as usual, but the washing must be very slight. It is best if the toning can be done at once, but in case of need the prints may be allowed to dry and be toned later, without any real detriment to the resulting picture. The toning-bath, as has already been said, is very simple and cheap. The alum and hypo should be dissolved in boiling water. The quantities are about as follows:

| | |
|---|---|
| Water | 50 parts. |
| Hypo | 15 " |
| Alum | 2 " |

but a strict adherence to this formula is by no means necessary. The solution presents a milky appearance, due to the presence of fine grains of sulphur, which are produced by the action of the alum on the hypo. For toning, the print must first be laid in the bath before it is warmed. In this way the film becomes hardened, which makes it possible to raise the temperature of the bath to boiling point. The heating of the bath is an important factor in the attainment of the tone; in a cold bath this is impossible. The toning takes place very slowly. After half an hour it should be complete, and if the desired tone has not been obtained in that time it is useless to leave the print any longer in the bath; it is better to begin quite afresh. The reason for this non-success in toning is to be found in the fact that the above-mentioned instructions have not been carried out. An old bath gives a more chocolate tone, the prints do not retrograde so much, as is the case with a new bath, which gives yellow-brown tones. By the use of old and new baths mixed together as desired, it is possible to produce quite a series of tones. Thorough washing is absolutely necessary. When the prints are spread out to dry they should be wiped over several times with a soft sponge to remove any adhering particles of sulphur, which would give a dusty appearance to the dry print.

---

### *A Pyro-acetone Developer.*

| | |
|---|---|
| A. Dry pyro | 1 part. |
| B. Sat. solution of sodium sulphite | 25 parts. |
| C. Pure acetone (not acetonic solution) | 5 parts. |
| D. Ten per cent. potassium bromide | q. s |
| Water to make | 120 parts. |

# PHOTOGRAPHING MACHINERY.

BY PHOTO-LOCO.

MANY things often conspire to make the photographing of machinery a matter of difficulty. Among these are the subject itself, its situation and the urgency of the work.

I will take these and other points in order, and hope to give some practical hints which will, of course, have been arrived at by the man who has had much experience in this work, but may save the beginner—amateur or professional—from many failures.

A machine or engine ought to be photographed when it has received the coating of "gray-filling" which precedes the final paint. This gives a matt surface of a neutral or bluish-gray, and saves no end of annoyance in the matter of reflections which frequently appear in the varnished surface. If the machine in this state is not available, something can be done by dabbing over the painted parts with putty. Care should be taken, too, in arranging the machine away from objects which can form reflections on its polished surface. Unfortunately it usually happens that it must be taken where it is or not at all, but even in this case it is often possible to rig up dark screens around it.

Bright steel parts should always be painted. Some prefer a species of white-wash, which is rubbed off afterward with a cloth. Better is a mixture of white lead and turpentine (of the consistency of thin cream), enough lampblack being added to dull the brilliance of the white, and then one-third (in bulk) of gold size to give adhesion to the mixture. After use, a rag dipped in turpentine removes the coating.

Now as to lighting. This, unfortunately again, has generally to be made the best of. We must aim at a rather low front lighting. Top light, owing to its casting heavy shadows, is bad: details are hidden in underlying parts of the machine, and detail, microscopically sharp, is what is wanted in negatives of these subjects. The engineer wants every nut and bolt to show. Therefore the tendency—of both indoor and outdoor lighting—to give too much top light must be counteracted. Much good can be done with reflectors. A white sheet, wood covered with tinfoil, or, for large subjects out-of-doors, sawdust or white sand strewn on the ground around the machine, are some of many efficient means.

Artificial light also is useful. A thin line of flash powder laid near around the subject, but not so near as to come into the field of view, is a help that can be adjusted to any extent.

Some few details connected with taking the picture fail to be mentioned. It is often well to lower the camera to within a few inches of the ground, thus getting details in the lower shadowed portions. Lettering is sometimes a difficulty. Letters cast in intaglio on the machinery may, if not plain enough, be filled up with a paste of whiting and water. The prominence thus given to the firm's name is a point which they will appreciate.

As regards background, it is hopeless, I am afraid, to expect to get such a white and even background that no blocking out need be done on the negative. But it *is* sometimes an advantage to reduce as far as possible the marks and dirt sure to be found on any background extemporized in engineering works. To do this, keep the background gently moving during exposure. Some object should figure in the print whereby an idea may be obtained of the size of the machine—say a 6-foot rule in the case of small machines and a man (who, by the way, should be engaged in looking after the machine and not in staring at the camera) in the case of larger engines.

Exposure, it need not be said, should be full and development commenced with a weak solution to get detail everywhere, and just enough density obtained afterward to give a plucky print. Too great density makes blocking out more difficult. In any case this is—except to the draughtsman—the worst part of the process, but it is absolutely essential for commercial purposes, such as catalogue illustration, etc. To become expert is simply a matter of

practice, but here are one or two hints. Avóid touching the film before blocking out, for any patches of grease from the fingers make it almost impossible to outline neatly with brush or pencil. Use Indian ink—ground by yourself to an absolutely dense black fluid free from brownness when viewed in the dish—for the outline, and fill in larger areas with a good mixture like Photopake. Place the negative on a retouching desk, with a mirror below to give a strong illumination through the negative. At night an incandescent electric lamp fixed to a stand which can be moved about under the negative is quite the best thing. Rule straight lines, such as the top of a boiler, with the drawing pen, and go round other parts with a long "duck" sable hair pencil well charged with color.

A steady and confident hand is a *sine qua non;* if you feel at all shaky or nervous, better leave this part of the business alone.—*The Photogram.*

## LIVING ACCESSORIES.

BY WILBUR GRUBEMAN.

In the far-away early ages of decadence, when photographic plates were increasing in size from the beautiful simplicity of daguerreotypes, and photographers were looking for something to fill out their area of paper, somebody made a visit to fairyland in search of help. He did not, unfortunately, go to the fairyland of our childhood, where princes and princesses were decked in bright array of jewels and marvel-wonder; but he went to the fairyland of evening relaxation, where the jewels are transmuted to tinsel and the marvel to drop scenes and canvas unrealities. So the accessory was born, and it was found to be wanting. Something more suggestive of life was asked for, and a plant was introduced. It was needful, above all things, that art be considered, and the bulrush, which has been guaranteed artistic since the day of the earliest and greatest of lawgivers, would probably have been chosen but for two vital defects: The bulrush stands straightly and uncompromisingly upright, and so offers no "opposing lines," and the bulrush is a home production. Now, the veriest of beginners knows that art, if it be the true and only genuine, is manufactured abroad, whether it be "fine" art or table relish. And abroad our forebears went and found a palm. It is, indeed, quite possible that they were merely driven south by stress of storm; but if so they knew it not, and returned with their spoil in a blissful belief that it had been obtained in foreign parts. From that day to this the palm has reigned supreme in the greater number of studios. Why? Well, largely from lack of thought. The drummer offers a palm and guarantees it artistic. Along it comes by express, and it is no trouble. It is not alive, but dead, starched stiff with green paint and in many separate pieces. The separate leaves are stuck in a moss-wadded vase, and there you are. No watering, no pruning, no fear of frost. And it is handy and useful for all ages over nude babydom, for which the hair rug is the only thing possible.

The palm lost its universal value as soon as it ceased to be a novelty. It may have its uses for occasional help, but the uses are not wide-spread. Is it possible, by slightly varying the monotony, to so alter affairs that more sitters may be attracted to the studio? I am, from a business stand-point, a great believer in advertising. We cannot get too much publicity—of the right kind. Now, publicity may be advantageously obtained in two ways: by the use of money and brains, or by the use of brains without money. Too often, unfortunately, it is attempted by the use of money without brains. Would not the introduction of a few flowers and growing plants into the studio prove not only superior to the palm, but also be talked about? Are you a photographer in a small farming district? If so you will find that quite a few of your customers want pictures to send to the "old folks" in Germany, or Sweden, or Ireland. Now, in those countries corn is never grown. Suppose that when the little girl comes to be pho-

tographed for the benefit of far-away grandmamma you let her hold, instead of a basket of paper flowers, a neat little braid of ears of popcorn. I venture to think that grandmamma will have that fully explained to her, and—what is more to the business point—it will be noticed by all the local people.

If the grown-ups like the idea, let them have a braid of the finest sample of ears you can get hold of.

So much for replacing one veteran with an up-to-date notion. In the case of plants, the thing is purely for a season. Do not, as I once knew a photographer do, keep a plant six months after it has lost its beauty and three months after it is absolutely dead. Let the plants be fresh and blooming, but do not on that account make the mistake that is often made with the palm, by putting them in too prominent a position. Why not replace, for just six weeks, the time-honored rustic handrail with a bit of real hedge?—three feet of narrow box filled with earth, and with a row of corn planted along it. It will soon be two feet high, and from then until it is four feet it can be repeatedly used. If you like, and it continues to grow, use it as a background —I don't recommend it. I knew one ingenious man who adopted this idea at my suggestion, and when the corn was two feet high he covered the front of the box with soft woollen cloth, spattered mustard seed thickly over it, and kept it moist. Naturally, he had in a day or two a box of living greens. A pot of oats rather thickly sown will soon come up, and when they ear out and commence to ripen will be effective for several weeks. But the great advantage of the scheme is that it is ephemeral. A few minutes or hours of planting and tending and a few days or weeks of a novelty and the whole effect is over and will make room for something else. A little variety and a little life is better than much dead weight of stock accessory.

## HASTE.

"MAKE haste slowly" seems paradoxical advice, but it contains the essence of true wisdom and is only another variation of the old saw: "The most haste is the worst speed." It implies that fussy, nervous, bustling haste is as perilous as it is unnecessary. There are many men who cannot see this, and who imagine that energy and push in business can only be exhibited by fussing and bustling, and that a person who takes things quietly and easily cannot be a smart business man. The result of it is that employers who have got this fallacy into their heads are always causing friction and vexation in their establishments. It is neither easy nor pleasant to be always goaded into a hurry. The mind wearies and frets under the strain. Labor that would otherwise be pleasant becomes drudgery. Irritation usurps the place of amiability. Fault finding and scolding follow. Employés feel strongly the influence of a fretful disposition. They are made unhappy and discontented by this constant unpleasantness of their employers. The whole staff of a business house may be put into a periodical state of ferment and agitation by the employer's conduct, and many a good business has been brought to the ground by persistence in such a course. Under the systematic arrangement of duties haste is avoided, while promptitude is ensured. The business goes on more smoothly, with fewer mistakes and less worry all round. There is nothing that can take the place of system to beget cheerfulness and spirit in the discharge of daily duties. "A place for everything and everything in its place;" "a time for everything and everything in its time," are the golden rules of business, and if carried out to the letter there is no need for fussy haste. Inattention, confusion, carelessness and slovenliness are entirely inconsistent with such order. Systematic arrangement of work or duties makes labor easy and pleasant, and neatness, promptness, thoroughness, and completeness are secured by the methodical way of doing things. Order, undoubtedly, secures dispatch. Methodical action will accomplish much more in a given time than slipshod

bustling from one thing to another. "Finish one job before you begin another" is a piece of advice that ought to be posted up in every factory, workshop, warehouse, office or place of business of any kind, but employers ought to be the first to encourage its being carried out, by abstaining from taking men off jobs before they are completed. It only results in an appalling array of unfinished work with no good result at the end of it. By close attention to one thing at a time it is accomplished more quickly, better and more easily. "One thing at a time" will perform a greater day's work than doing, or trying to do, two or three things at a time.

We were much struck recently with an article which set forth the essential difference between "hustle and bustle." It is quite true that there is a very wide difference between the two words, when you come to think of it. Your true hustler is never a bustler. Hustler is synonymous with "push," which in its best sense is well directed. Bustle is only energy superfluously displayed in the wrong direction. Nature does not present a more consistent and concentrated mover than your hustler; his head is always one way—and that is the right way—his work going on with the regularity of a stream of flowing water. But look at the erratic course of your bustler. He is here, there and everywhere, accomplishing nothing, but generally hindering everything by too much haste. The methodical hustler has always time to look around him and ahead to see what everyone is doing and which way the world is wagging; to work out new ideas and keep pace with the times; to cut out new channels while fully securing the old. In short, he is the most busy and most leisured man you meet. He is always first to hear of a possible good thing, and it isn't his fault if he fails to grasp it. While his business engrosses him he yet finds time to fulfil a score of functions which would fully occupy some men. He has the astuteness of age, but never grows old, because he never yields to business rust. In his dealings with his servants he never "rushes" them, but he keeps them smart. You will as soon find his books a week behind as you will his clock an hour late. And the tick, tick, tick of his establishment means money, money, money. But for your bustler—what a contrast there is! He never has time to look outside his own door to see what his competitors are about, because he fondly fancies that if he is out of the way the work must stagnate and his employés will relax their efforts. He is like a squirrel in a rotating cage, restlessly moving, but never advancing. His track through a day's business is like his path through life, scattered with the records of incompleted plans and half-finished work. He has no fixed system, but a new system for every month in the year, because he bustles each one out of gear as soon as it is created. His establishment is strewn with incompleted work and unfilled orders, because he makes it a practice to hurry up the last orders to hand by taking his men off those already in progress. Any customer who comes along and demands his work in a hurry has got to have it at the expense of all previous ones. It is not long before everything gets out of gear, and then there is a general "wipe up." Overtime has to be worked, new hands engaged, faithful old hands dismissed for imagined slowness, stock is brought in recklessly, goods are packed up and sent off somehow—anyhow—so long as they get off in a hurry. No wonder the bustler wears a worried look and has not a moment to spare for the amenities of life. His clock ticks with the same slow measured tick as that of the true hustler, but the swing of his pendulum may signify loss, gain, loss, gain—he never knows which tick has the louder sound. If we would all take a lesson from our clocks we should never hurry, because we should learn that the secret of successful work is steady, continuous effort. A clock that gains one day and loses the next is an intolerable nuisance, and equally so is a clock which is always fast. There is an analogy here which the bustler should take to heart.—*Penrose's Process Work.*

---

A SUBSCRIBER in New Zealand writes that in his opinion *Mosaics, 1901*, is the most useful year-book yet published for the professional worker. Price 50 cents, postage free.

## PROFESSIONAL PHOTOGRAPHY—NOT PORTRAITURE.

How many people gain livings by photography outside of portraiture? This is a big question because the number is very great; it is probably increasing—and it has entirely come into existence within the last ten years. To take one instance, how many thousands of men, scattered throughout the States are living by photography in the workshops of blockmakers? What of those men who pin up the photograph or sketch to be reproduced; focus it sharply, and expose with a ruled screen in front? Who are the men who know enough of development to tackle plates so exposed, and get the utmost value out of them?

These are no mere abstract questions; they very vitally concern the portraitist, for it is either from entirely outside ranks, or from among those connected with the fraternity that these men are drawn. Hundreds of photographers are bringing up their sons and their daughters to the profession they love; and to them it should be of interest to know all the possibilities before them. Families sometimes grow more rapidly than towns do, and the man in a small place who trains three or four sons in his steps comes to a time when the limits of the town's capacity is reached, and what has kept one will not keep four. Hundreds of sons have found new places growing up, and by establishing little businesses have grown up with the places. But hundreds of others have moved away from their homes to fill situations in the studios or work-rooms of men with larger businesses. Probably a situation in a blockmaking works will fit many a photographer who cannot get into his more legitimate field. It is no uncommon thing nowadays for a reporter to become a photographer. All the illustrated papers have had a photographer in Cuba, and in the Philippines, and their offices are littered up with prints or tightly curled films—not one tithe of which they can ever use—sent to them by their reporters and by officers or others at the front. If a reporter becomes a photographer, why not a photographer become a reporter. Why not, indeed; several of them have already done so. In every large city there are a few men who work solely as press photographers. It is a hand-to-mouth existence, and very much of a gamble. Sometimes a week of hard work draws blank; sometimes it nets forty or fifty dollars. This of course refers to the "free lances" of the profession. There are men receiving a steady weekly wage, not a very large one, from papers, in return for which they are expected to be all-round geniuses. The majority of these press photographers, we fear, drift into the positions rather than climb into them; and if they were more reliable as workers, and better as business men, they would find the work fairly remunerative. To take another line of work—the magnificent railroad photographs which Rau, Jackson, Nims, and others have turned out. The work is a class by itself, created by these men, and they have reaped the benefit of it.

There are one or two men in New York who do nothing but hunt round for topical pictures which, when got, they print in platinotype, and place, through an agent, in the print shops. The agent sends in his orders day by day, two prints from this negative, five from that one, and no prints are made into stock—just turned out day by day to meet the orders. And these men make a living, better than many poor photographers.

Speaking of the railroad pictures, the possibilities are not limited to the promoting of travel. Look at the work of Hall, or of Langill, in New York. Hall has made some wondrous things, six feet long, of Brooklyn Bridge; of New York's skyline; of other subjects, which sell.

There is a big opening for a man who can do beautiful technical work, among the insurance companies. They want records of fires, and wretched are the things they often receive when they commission the nearest photographer to do the work. There are men who make a specialty of photographing cattle, or of machinery, or drummers' samples. And there is room for more.

Portrait photography remains, and will remain, the "grand prize" of the profession; but there are opportunities opening all around for those who have not sufficient outlet in their present places. A

few of the opportunities have been seized but many more remain. They are not standing open, like a rat-trap, baited with a tempting piece of cheese—there is no advertising in the papers for the man. But the places are there, and only await the discovering.

One year hence, five years hence, there will be more specialist photographers making a good living than there are to-day. The question is whether they will be filled by men who are to-day wide-awake amateurs, or whether they will be filled by those young men of the profession who are to-day suffering from the effects of local over-crowding.

## STUDIO ACCESSORIES.

THE professional photographer desirous of holding his position, keeping in the front ranks, and making his business a paying concern, must keep constantly before him the state of his studio accessories. Portraiture is primarily a matter of dress, and secondly of furniture. The sitters do their part in appearing before the camera adorned with articles of attire adapted to the momentous occasion, the photographer having thrust upon him the duty of providing an environment which shall not spoil the effect his clients' desire to produce for their own satisfaction and the edification of friends.

It is sometimes urged against the portraiture of our leading professionals that the furniture is too profuse, occupying so large a portion of the stage that the sitter becomes merely a detail, an after thought, put in to supply the human element in a picture, which might be appropriately labelled: "Interior with Figure." To the photographic purist, the "Art for Art's sake" man, this criticism may appeal; to the man of business it will be made in vain, being summarily dismissed as of no practical worth. With this view we entirely agree, confessing to some regard for a portrait containing a well-arranged selection of accessories. The photographer must please his clients, and when these are drawn from the upper classes—persons living in homes richly furnished—they require a portrait photography in harmony with such surroundings, desiring works having the air of wealth, of luxury, and it is thus in the interests of trade to meet the demand. In doing so the photographer violates no principle of pictorial representation, for in all times the artist has depicted his sitters in association with the things of their daily life, all artistic sentiment being against a duchess in a dairy, or a dairy-maid in a drawing-room.

While it is necessary to keep the accessories in harmony with the social position of the sitter, it should not be overlooked that all classes are susceptible to a certain amount of flattery in this connection, being more pleased with a portrait giving them a social standing above, rather than below that which they really occupy. In all cases the photographer, whatever may be the class that give him patronage, should be in advance, having accessories of a more expensive and luxurious nature than his customers are likely to possess. Only in this way can he apply this very subtle form of flattery. He already flatters the features by retouching, and this latter service is flattery to the dress. In working along these conventional lines a difficulty of a technical character will arise, needing attention to be overcome. The furniture designed for household decoration is inconvenient for studio uses, not lending itself readily to photographic methods of composition and posing. It is too angular, possesses awkward scrolls, quite preventing the subject being brought close enough for securing a good effect. A small knob is sufficient to separate the sitter from a chair or table, creating a lack of unity in the composition, making it a picture of two objects in place of the simple design intended. Photographers who have experienced this drawback are constantly on the watch for any article combining a good design with utility in studio practice, in this way renewing their stock. Attempts have been made in supplying accessories to suit professional purposes, not with

much success, for, while quite adapted to that end, they diverge too much from domestic patterns, in a picture looking what they are—quite photographic. There is here a want yet to be supplied, a field is open for the furniture designer, who is able to combine photographic utility with a pattern neither grotesque nor unusual.

In general, professional portraiture must be conventional, the usual thing, the photographer, whatever may be his own desires or aspirations, being compelled to meet the demands of the public taste. In particular localities, however, a class exists who will patronize work departing entirely from popular notions. Novelty attracts, and the man with a strong personality can impress the public, lead them to support him, and acquire a taste for his own individual style. An effective portraiture will follow from discarding all accessories and paying close attention to expression, lighting, posing, and drapery. Mrs. Cameron was one of the earliest of these unconventional types, though since her time others—such as those who model their work after the paintings of Rembrandt, Gainsborough, Reynolds, or Velasquez—have met with success. To abolish accessories is to give added importance to the background; it becomes the chief study, requiring every attention to make it harmonize with the style of the subject. It is for this reason that the above mentioned painters have been so closely copied by the Cameronian type of photographer. To some tastes this simple portraiture is very agreeable, and, with the right man, and a fitting neighborhood, enough patrons are secured to make it commercially profitable. A few can even go beyond it, with work that approaches to the "soul-studies" characteristic of Watts. Mere sketches and suggestions in place of the clear, sharp, well-defined photograph. However interesting these productions may be, in the present state of public taste, the demand for them must remain strictly limited, and the majority of the professionals could not insist on supplying such work to their clients, and still retain a profitable connection. From a financial point of view it would be a distinct gain if expensive accessories could be abolished, since a charge on a business which they entail, not only in purchasing but in keeping in good condition, would go with them. This was impressed upon us once when visiting the studio of a photographer of this class, a well-known man, whose work is much appreciated; beyond a few backgrounds, painted by himself, some drapery and screens, his accessories were only of nominal value—a scanty outfit, calling for little expenditure, reducing the cost of working expenses to a minimum, a consideration when competition is so keen as nowadays. Anything tending to keep down expenses without reducing efficiency is money saved. Here the business man must study his public, for it will economize his resources if he can rely on clients who are satisfied with a portraiture of the simple kind.—*Photographic Chronicle.*

## NOTES: CURIOUS AND INTERESTING.

*A Patient Photographer.* Recently Mr. Enock gave a demonstration before the Royal Microscopical Society on the development of a species of dragon-fly. Readers will remember Tennyson's beautiful description of the insect's metamorphosis in his poem, "Two Voices." Mr. Enock wished to photograph every stage in the process whereby the nymph or chrysalis, with its wonderful "mask," evolves into the perfect fly. He had to take over 1000 photographs before he secured a perfect set, and as the process of emergence from the nymph-skin frequently takes place with great rapidity, alertness is required. Three of the photographs of this stage of the process were taken in six seconds. In this way photography has truly become the handmaid of science, and has illumined many of the dark spots of inquiry; but it is not every photographer who possesses the patience and perseverance exhibited by Mr. Enock in his pursuit of knowledge.—*Photographic Chronicle.*

*An All-round Man.* The following advertisement is clipped from an English photographic journal: "F.R.P.S. (Fellow of

the Royal Photographic Society), First Prize-man, and Silver Medallist : first-class honors in photography, theory and practice, and photo-mechanical work; City and Guilds of London full technological diploma; S. K. (School of Science, South Kensington). Certificates, organic and inorganic chemistry, qualitative analysis, optics, etc., undergraduate in first-class London University, etc., with considerable experience in general photography, trichromatic block-making, etc., with foremost firms, is open to re-engagement; several specialties, highest references, and testimonials; moderate salary for permanent berth with a good firm, either manufacturers, dealers, or photo-engravers."

*The Dark-room Light.* Writing in the *Photographic Journal* on this vexed question, Mr. Howard Farmer says: The light used in 80 per cent. of a large number of dark-rooms examined is only 2.5 candle-power, and the filters in general use greatly reduce this light (*i. e.*, absorb it as a whole) to the extent of from 40 to 98 per cent., a range of reduction which means that the illuminating power of the lamps is only from 1-16th to 1-20th candle-power. The solution of the problem of getting bright illumination of a kind which will not fog a plate is very difficult with commercial colored glasses, because these almost always permit blue-green and other actinic rays to pass. Hence the thickness of glass required to sufficiently reduce these latter lowers the luminosity of the filtered light enormously. A solution of potassium bichromate is practically totally transparent to red and yellow, and totally opaque to blue-violet and ultra-violet, so that an illumination can be obtained which is many times greater than that obtained through orange glass, and is just as safe. A stratum of 6 per cent. solution of potassium bichromate of thickness three-eighths of an inch is used in conjunction with a 10 candle-power incandescent lamp. This gives an even flood of light in the dark-room, and is arranged on a shelf above the developing-table, so that the direct rays do not reach the dish. Orthochromatic plates can be developed with perfect safety if the bench be fitted with a shelter in which the plates can be placed in the developer.

*The Photographic Salon, 1901, London.* The prospectus of this exhibition is ready and may be obtained on application to the honorary secretary, Mr. Reginald Craigie, Dudley Gallery, Piccadilly, London.

*Focusing with the Lens.* Nearly every photographer at one time or another has felt the need of a camera which can be folded into so small a compass as to go easily into a coat pocket, and there are several cameras of this class which fulfil their purpose more or less completely. One of the chief difficulties in designing such an instrument has been to devise a focusing method which shall be effective, yet still leave the camera, which is necessarily of light construction, rigid. The lens-maker has now come to the relief of the camera-builder, and we have seen recently a modification of the Cooke lens, in which the focusing, from infinity to quite a close object, is effected by separating the lenses, instead of by moving the complete lens in the conventional manner. This device will obviate the necessity of a moving part in the camera body, which can be made so much the more rigid in consequence. If the covering qualities of the lenses are not affected, this application of the telephoto principle should be an acceptable advance in construction. The focusing is done by rotating the front lens on the lens tube, the focal distances being marked upon a ring in a similar manner to the iris diaphragm apertures. By the use of a lens with the new adjustment, a fixed focus camera with an instantaneous shutter working on the diaphragm can be converted at once into a focusing camera, which is an obvious advantage and an advance upon present possibilities.—*Photography.*

*Cost of Prints.* According to the *Photographic Chronicle*, the cost of producing a dozen cabinet prints by various processes is (in England): Carbon, 5*s.* 3*d.*=$1.26; platinum, 4*s.* 4*d.*=$1.04; print-out-papers, 1*s.* 9*d.*=42 cents; bromide paper, 2*s.* 11*d.*=70 cents.

*Anthony's Photographic Bulletin* for July appeared in a new cover of pleasing design and with a photogravure frontispiece; both welcome improvements on the old order of things.

PORTRAIT

By Langfier, New York

PORTRAIT
By Langfier, New York

PORTRAIT
By Langfier, New York

PORTRAIT
By Langfier, New York

PORTRAIT
By Langfier, New York

STUDIES
IN
PORTRAITURE

BY
LANGFIER,
NEW YORK

By Langfier, New York

By Langfier, New York

PORTRAIT
By Langfier, New York

PORTRAIT
By Langfier, New York

PORTRAITS

By Langfier, New York

PORTRAIT
By Langfier, New York

By Langfier, New York

A. and L. Langfier

PORTRAIT
By Langfier, New York

# LANGFIER—PORTRAITIST.

We have pleasure in presenting in this number of the Magazine a representative collection of portraits by Langfier, of New York. Apart from its evident merit, the work is peculiarly interesting because Mr. Langfier comes from a firm holding a very prominent place among the photographers of Great Britain, and so we get a view of British professional photography at its best.

The American traveller in Britain needs no introduction to the skill of the Langfier family in photography. Mr. Langfier, Sr., is one of the oldest living professionals in England, having been busy in his profession almost fifty years. He retired a few years ago to enjoy a well-earned prosperity. The firm of Langfier, Limited, composed of his sons and brother, is an immense concern, with establishments in London (two), Birmingham, Glasgow, Dublin and Belfast. The Glasgow studio, described a year or two ago in these pages, is the headquarters. The Bond street studio is, in equipment and decoration, one of the finest in the British metropolis; the smaller studio, located in the Hotel Cecil, on the embankment, is devoted in a special way to the needs of wealthy travellers.

The portraiture which has made the firm of Langfier, Limited, famous is necessarily of the best sort. The patronage of the Langfier studios is gathered from the aristocracy of Britain and wealthy Americans travelling in Europe, from King Edward VII. to Andrew Carnegie. Large carbon portraits are a specialty of the Langfier studios, only carbon and platinum portraits being offered to their customers. Colored miniatures form another special department, no less than five skilled miniaturists being steadily employed by the firm.

Every member of the Langfier family is a photographer and has charge of a separate branch studio. Mr. A. Langfier, of New York (the right-hand figure in the portrait group of the brothers shown among our engravings), has had a long training in every branch of portraiture, and has received many medals at various art exhibitions during the past few years. Although a portraitist first and last, he is peculiarly skilled in design, in coloring and in finishing. A feature of his work, which we hope to show in a later issue, is the special design in monotint or color, which so often surrounds his large portraits.

The frontispiece of the Magazine is an example of this feature. The portrait itself is about 14 x 17 inches, and was made by incandescent gaslight. It is cleverly colored, and the frame is designed and painted to carry out the sentiment suggested in the title. Of course, our engraving, although carefully made, gives a very poor reproduction of the softness and richness of color which charm one in the original. But we could not resist the attempt to show our readers an idea which suggests so many possibilities. It is a remarkably clever piece of work, and in the original bears no evidence of not being a daylight portrait.

The examples of Mr. Langfier's skill were chosen at random by us from the walls of the studio-rooms, and are simply representative of his average work. The wonderfully appropriate way in which some of these exhibits are framed will not escape the reader. The originals were carbons of a warm brown color in dull-gold mats and frames. The nude half-length of a child was a platinotype in a green-bronze frame.

Mr. Langfier gives unusual care to his portraits of men, and the three examples we reproduce from this class show his skill. And yet our readers will agree that his portraits of women and children are equally admirable. Since his arrival in New York a few months ago Mr. Langfier has very successfully developed a branch of portraiture little known on this side, viz., artistic portraiture at the country homes of his patrons. This specialty is a big feature of the European studios of Langfier, Limited, where it is a frequent occurrence for an operator to be asked to spend four or five days at the home of this or that member of the nobility, during which visit the patron and his children or guests are photographed amid the varying surroundings of their daily life and pleasures. The value of this class of work in extending the connection of a photographer among the prominent people of his locality will be

appreciated by our readers. Examples of Mr. Langfier's work along these lines will be given later in the year.

Asked to give his views on portraiture, Mr. Langfier replied: "I put my faith in real portraiture as distinct from fads, fudges, and fuzziness. People like to see ultra effects, and can admire them; but for themselves they want portraits, artistic likenesses, original, if possible, in pose and handling, but natural and pleasingly lighted to display them to advantage. One's work must meet the public. I appreciate the individual-print idea, but it can be carried too far. Most people want many prints, and they must be uniform. Character is the keynote to success. Get that and art in your work, and you will succeed."

The shortness of the time which has elapsed since Mr. Langfier arrived in New York has prevented the sending of an exhibit to the National Convention. This is regrettable, as we feel sure that an exhibit of his large carbon portraits on etching paper would have been viewed with considerable interest by the craft.

## PHOTOGRAPHY AT THE ST. LOUIS WORLD'S FAIR.

AMONG the many "features" which are being placed before the managers of the forthcoming World's Fair at St. Louis, the following suggestion made by J.C. Strauss, Esq., will undoubtedly commend itself to the readers of this MAGAZINE, whether professional or amateur. The expositions thus far held, not excluding Paris, have utterly failed to show the wonderful accomplishments, applications and possibilities of photography, and we trust that Mr. Strauss' suggestion will be taken up and carried through. Mr. Strauss writes as follows:

"Permit me to suggest a feature for our World's Fair which would, in my opinion, be essentially different from what has been done at any former international exposition—would arouse great interest in every civilized country and would attract the attention of every visitor.

"Have a pavilion devoted exclusively to pictures produced by photography, whether made by amateur or professional photographers, provided same give evidence of artistic feeling.

"The universality of the camera has caused nearly every person in the more enlightened countries to have a lively interest in photographic productions.

"Heretofore only limited space, usually in a building devoted to manufactured products, was given to photography. In recent years portraiture by photography has successfully invaded art realms, and commanded recognition by art critics as being far above and beyond the mechanical in processes and in results.

"The display of pictures should be along salon lines—that is to say, only such pictures should be exhibited as are considered worthy by a competent committee of artists (not photographers), no distinction to be made between amateurs and professionals.

"The detail and clerical work of giving this feature the widest and most general publicity would be conducted by the photographers of this country. Through their efforts in arousing the interest of their fellow-craftsmen, both by direct communication and through the medium of periodicals devoted to photography, the St. Louis World's Fair would become advertised in every town of any consequence on the globe, and gain the enthusiastic support of more individuals (amateur photographers) than would result from any other contemplated display.

"In connection with the feature here suggested an effort should be made to raise funds with which to commission some sculptor to make a figure in plaster of Daguerre, the father of photography, to be placed in this pavilion. Later on this should be cast in bronze, appropriately placed, to become one of the city's permanent adornments in statuary.

"Should the ideas here suggested receive any encouragement from yourself and the directors, I should like to hear from you at the earliest moment, so that I might place the subject properly before the convention of the Photographers' Association of America, which meets at Detroit early in August, and would also endeavor to have their convention of 1903 meet in St. Louis."

# INSIDE THE STUDIO.

BY C. BARNES.

It has often been a source of perplexity to me as to how and why photographers in general have been led away from the realism of domesticity and homeliness in the interior fittings and furniture of their studios. Why a photographic gallery at first sight should remind one more of an old curiosity shop or the storeroom of a collector of *bric-a-brac* and antiques than anything else, I am puzzled to discover. Painters of to-day—that is to say, portrait painters—usually introduce as accessories to their pictures such articles of furniture or virtu as are likely to harmonize with the central subject, whereas photographers, for some occult reason unknown to the writer, seem to have a peculiar furniture of their own. Chairs utterly unlike ordinary chairs are to be found in every studio—perhaps every is too strong a word, so I will say most studios—and are dignified by the title of "posing chairs." These have a tendency to render a photographic portrait to a certain extent unnatural, as do also the miniature tables that usually are associated therewith. What is more unnatural than a portrait of a lady in the costume of the present day surrounded by furniture of a description that is not to be found in any dwelling-room, or, in fact, in any other room at all than the photographic studio or the photographic dealer's warehouse? Our aim, I take it, is to represent our sitter as at home; and, to do this correctly, why not use furniture of a description that is in everyday use? I should like to see the studio furnished like an ordinary drawing- or sitting-room, with the exception that the chairs, etc., would not require to be all of one pattern or make, though they should all be ordinary chairs and tables. It was at one time the fashion to represent sitters standing or sitting by the side of a broken column, giving the pictures the appearance of advertisements for some enterprising monumental mason; now they are made to represent advertisements of an entirely new make of furniture. The camera and stand are bound to have their place in the studio, but these should be the only articles of furniture unlike those in an ordinary sitting-room. That relic of bygone days, and aversion of ladies, the head-rest, is still retained in many studios; but it is only on occasions that there is now any real necessity for its use. The introduction of rapid plates has dealt it a severe blow; and, personally, I never use it except for very late sitters, when the sitting is likely to be a prolonged one, or in the case of an exceptionally nervous sitter.

Then, why should artificial ferns, palms, and flowers be so frequently introduced in the pictures and kept in the studio, when the real things are, if anything, less expensive, and, of a certainty, much more natural? The presence of artificial flowers stamps the studio as something different from a sitting-room, while the presence of real ones lends a charm to the place, and renders it much more pleasant. Have as many plants and sweet-scented flowers as you like as ornaments and accessories, but away with imitations.

Screens are sometimes necessary to obtain effects of light, but I cannot see why studio screens should not be made as like those in ordinary use as possible.

A selection of children's toys is a great acquisition; but there is no necessity why these should not be kept out of the studio until required, as should also be such accessories as swings, hammocks, boats, masts, stiles, fences, etc., which are only rarely used, and the presence of which often makes the studio appear lumbery and untidy.

To keep a studio clean and tidy requires some trouble-taking; it is not sufficient to let the boy sweep it out and pretend to dust it every morning. If the place is to look homely, natural, and nice, a woman's hand is required. Let a man or boy be ever so domesticated in his tastes or talents, an average woman, or girl, will obtain a better and more comfortable-looking result in one short half-hour than he will in three or four times that period. Let the proprietor's wife (if he has one, and she is at hand) see that the studio is put right and properly dusted every morning before the

operator commences work; and, if there be no wife handy, let one of the young ladies on the premises do the duty for her. A studio nicely and tastefully arranged renders it easier sailing for the operator and pleasanter for the sitters.

The windows of the studio also require cleaning more often than they get done as a rule. Clean windows, both at the side and at the top, not only make the place look better, but they add to the rapidity of the exposures to a much greater and more marked extent than is generally imagined. Nothing looks worse in a dwelling-room than dirty windows, and the same applies equally to the studio. The insides should be rubbed over every morning, and thoroughly cleaned once a week; it is surprising how dirty they will get in a few days, and it can only be discovered by actual experiment what a vast amount of light is cut off, or rather prevented from entering the studio, by dirty or partially cleaned windows. The blinds, especially the white ones, should always be made in double sets, and frequently sent to the wash, as a dirty blind or curtain is more detrimental to rapid exposures than even a dirty window, and the dust and dirt have a way of accumulating on the blinds and curtains very quickly, and in no inconsiderable quantities.

The coloring or decoration of the studio itself is a branch of the subject on which very little need be said here, as utility is the prime question for consideration. I have seen a studio in which all the interior walls were painted a deep chocolate, which had not a bad effect so far as looks were concerned, but was, nevertheless, about the very worst color that could have been hit upon for photographic purposes. A medium gray or pale green is possibly the most useful shade of color, being pleasing to the eye and giving off soft reflections.

While it is beneficial to keep down the polish on all articles of furniture likely to be included in the pictures, it is in nowise a necessity that the camera or camera-stands should also be allowed to lose their pristine brightness. By the aid of a bottle of polish and a modicum of that rather rare compound yclept "elbow grease," administered occasionally, they may be kept bright and nice.

## FINISHING PLATINOTYPE PRINTS.

BY M. P. BELL.

THE finishing of platinotypes is a special branch of work. The paper allows more scope for brush-work than does the more finely textured glossy paper, and often it needs more. There is roughness in the texture of the image on the platinotype paper that needs pulling together. Careful handling is necessitated by the moisture-absorbing quality of the paper. One must know, too, just how much color to put into one's brush for the effect desired, as a false touch of color, once put on, cannot well be got off again. When once the requisite lightness and firmness of touch have been attained, however, platinotype paper offers a delightful medium for brush-work, and a well-finished platinotype print is most pleasing to the eye.

The beginner should take up a few waste prints for his early practice. A few black specks may be noticed here and there on the print. These must be lifted out bodily with a knife. A small scalpel is the best knife for this purpose, with its rounded blade and pointed end. Practice in its use will bring skill, and the specks can be easily removed without a mark on the print. Unless they are taken out they will entirely spoil the effect in the portrait.

When a too heavy touch of color has been put on, it may be reduced in intensity by quickly applying a brush that has been washed out in clean water. This must be done with scrupulous care or the surface of the paper, being soft, will rub up, which will be fatal to the print, as it is almost impossible to get it smooth and even again.

The roughness of the paper also necessitates care to see that the color is so laid on that it appears right whichever way the print is held to the light. It will, of course, look best when the print is viewed in the

same light-direction in which the work was done, but the finisher should turn the print round as he works, and view his work from both sides—*i. e.*, lighted from left and right—as the work proceeds.

Have your colors ready: lampblack and sepia, water, a No. 2 sable brush for the eyes and fine parts of the face, and one or two larger brushes for the broader effects of dress and background. Have also two or three compartments in your palette—a china one—for color of various thicknesses, or two or three little saucers.

Look at the tone of your print; if it is a black tone, the lampblack by itself will probably match it; but if it is of a warmer tone, slightly inclining to brown, it will be necessary to mix with the black a little sepia. See that the color, when mixed, is exactly the tone of the print. I have seen photographs that have been finished with a color that did not match, and the effect was execrable.

I have always found it well to begin with the eyes, after doing the usual spotting, for spots distract one's attention; the eyes speak out the mind and character of the person plainly, but they have to be done with the greatest care. Do not try to alter them unless you understand the principles of drawing. Observe where the pupil comes. The pupil and shadows of an eye often come out too faint in a platinotype, and need strengthening; but it must be done lovingly, not to put a black patch of color in the middle and a black line around with a strong black line for eyelashes, but to put the color in with care and judgment. The eyelashes may be strengthened, but with care, and the eyebrows and any inequalities of lighting blended. This is where the pulling together comes in; a strong light here, which catches the eye too much and must be toned down, or a little shading in of the neck there, bringing all into harmony.

The hair, also, often needs attention. In the case of ladies, perhaps, a fringe has got an awkward break in it which needs to be filled up, and some shadows may require to be strengthened, or high lights toned down. Especially is it necessary to touch up the hair in cases where it is turning gray or is quite white. Gray hair always photographs whiter than it is, and people are often sensitive about their hair turning gray, so this must always receive special attention. It must be darkened in all the shadows and carefully shaded in all the high lights.

Having finished the face, you must now take the dress. In white dresses a good deal will be found necessary to do; shadows to be strengthened and other shadows, perhaps, to put in where detail is wanting.

A great deal can be done in this way to improve a photograph and make a pleasing picture, especially in evening dresses, where filmy lace or chiffon seem to compose the bodice.

The background is a very important part of the picture. There are two ways in which a background can be put in. One is: have some black chalk and white chalk scraped to a fine powder, also a little sepia chalk to tone the mixture to the color of the picture, and with a pad of cotton-wool rub the color into the background, with a circular motion, until the desired tint is obtained. Care must be taken to have no grit in the powder. Now, with a piece of pointed india-rubber trim off the edges either with a suggestion of leaves or a cloudy effect. There is room for much fancy in this method; it is a quick and ready way of putting in background, and is very effective.

The amount of background must, of course, be regulated by the kind of picture it is and how much is required to throw up the head and shoulders sufficiently in relief.

The other method of putting in a background is to wash it in with color. This requires the greater skill, and is much the more artistic. Your larger brushes and other saucers will be required now.

Take the thinner color first and wash quickly and evenly over the part of the background you wish to color. Have another large brush ready, washed out in clean water, to take off any hard line that may come; then take your thicker color and put in the denser parts. This putting in of cloudy effects of background with washes requires a good deal of practice. There is great scope for taste and skill to be shown in the painting in of a proper background.

# AMERICAN PROFESSIONAL PHOTOGRAPHY.

BY A. LOCKETT.

THE American invasion is on every one's lips just now; our cousins across the sea are buying up our steamships, running our electric railways, dominating our Stock Exchange—even, with sublime audacity, winning our Derby and Oaks. The subject has its interest, from a photographer's point of view, also, when we see the growing favor in which American-made cameras are held, and the strong and much discussed attitude of a certain well-known Transatlantic company for the supply of photographic materials. While we can, doubtless, afford to smile at the absurdity of those alarmists who can for a moment seriously think that British trade supremacy is at all in danger, it is apparently beyond contradiction that our Yankee friends have a certain business ability and a forceful, decided way of doing things, which, perhaps, we may do well to follow. Under the circumstances, it is not unnatural that some of us have been asking how American professional photography compares with ours, and whether in this direction, as well, they have secrets of success which would be worth our while to study and imitate.

Careful inquiry and comparison seem to prove that, in the higher class of photographic work, both professional and amateur, it is not unduly flattering our national vanity to say that we hold our own, although by no means with the greatest of ease. It would, perhaps, not be unjust to declare that where the best British excel the best American photographers, if at all, is in their greater attention to technique. American work, even the highest, often shows a carelessness in this respect, a lack of regard for that scrupulous and minute study of every detail in the mechanical part, that is always so gratifyingly evident in the productions of our own leaders. Without making any innuendoes, or specifically attacking any particular worker or school, is it not, to some extent, true that in America rather too much credit has been given to certain false teaching of so-called art—art only in name and not in reality, which, in its more aggravated forms, seems to think that the less like a photograph the production of the camera can be made, the more triumphant is the success of its creator in evading the narrow trammels of mere formula and routine, and in causing his individuality to shine forth from the print? We by no means wish to infer, of course, that first-class professional work in the States exhibits this influence to any very great extent, or that work of the description condemned is at all representative. Our meaning will be better understood if we say that there is a decided taint or leaven of the evil ideal mixing with otherwise sound and admirable execution. However, as has been said, America at her best has no cause to be ashamed, producing, as she does, many brilliantly clever workers of international celebrity. The average charges for the best work are rather lower than we are accustomed to, although some artists favored of the élite command practically fancy prices. Women workers are much in evidence there, in the higher branches of photography; some of the finest and most original productions in the chief cities, more especially in New York, coming from their studios, and deservedly securing for them a large and profitable share of that pecuniary guerdon of success which few of us can afford to ignore.

Let us go from the highest to the lowest, and ask how the cheap and nasty American photo compares with its British contemporary? The ferrotype plays there a much more important part in lower class work than it now does on this side the Atlantic, and is turned out by the hundred thousand in the paltriest and commonest forms. The plebeian part of the Transatlantic public is, probably, even more Philistine and tasteless than their equivalent over here, as perhaps might be expected, considering its heterogeneous composition and mixture of many nationalities, at any rate in the larger towns and cities. It is perfectly true that the worst of our work is quite as horribly inartistic and painful as anything to be seen in the States. Perhaps the only difference to be noticed in favor of the latter is that over there they certainly seem to

make their commonest productions pay them better than the corresponding class of work does here. That is the special point to be marked in the character of the followers of the "Star-spangled Banner," the intensely practical and business-like way in which they carry out even the simplest proceedings of everyday life, and their talent for the acquisition and multiplication of the "Almighty Dollar." One is tempted to recall the anecdote related of an American naval officer just after the war with Spain had been brought to a successful termination. A British friend had been laughingly commenting on the imposing character of the armaments on American ships and the elaborate attention given to gun practice. "Oh," said the man of warlike deeds, reproachfully, "you want to kill your enemy, don't you? We do." In like manner the Yankee business man practically lives up to the saying, "You want to make money, don't you? We do." And is far from ashamed of it.

Grotesque and comic ferrotypes of the kind representing the sitter's head on a donkey's or some other animal's body—the variety of photograph, in fact, which we have learned to associate with side-shows at exhibitions—are more popular in America, and pay their producers well; there, at any rate, the day of the ferrotype is not yet over. These cheap productions, intended to please and satisfy the uncritical masses, and making no pretensions whatever to artistic merit, call for no particular comment. The clientèle, mode of carrying on business, and methods of working are practically the same as we find here. More is done in the way of cheap enlargements, of which a large quantity are turned out, of by no means bad quality. The Yankee photographer generally makes his own enlargements, and gives little patronage to the "trade."

It is in middle-class photography, however, that America can afford to give us a hint or two. The portraits they produce at from as low as two to four dollars a dozen are, in the majority of cases, strikingly superior to anything done in this country at the same price. The finish is better, more pains are taken at every stage, and the general result is incomparably more artistic than the corresponding medium-grade British production. The middle-class American photographer is, as a rule, thoroughly up-to-date. He will have in his studio the best and most modern apparatus he can afford, the most tasteful backgrounds and accessories. He is generally better appreciated, and, on the whole, treated with more respect than his British confrère, well-educated in the pictorial possibilities of his business, yet always seeking rather to give his customers what they desire than to satisfy his own private fads as to how the work should be done. He mostly shows considerable taste and an acute judgment of what will "take" in the arrangement and display of his show-cases. He never lets a chance go by for want of a little pushing or puffing, which latter he carries to an extent that would, perhaps, seem infra dig. to some of us. While never losing sight of the fact that he is running his studio for profit, and not for amusement, he is, on the whole, full of a praiseworthy anxiety to give his public the best possible value for their money. He bestows particular care on the finish of his work, rarely has other than neat and tasteful mounts, and attains, generally, a rather high level in lighting and posing. The owner of the middle-class photographic establishment in the States, too, will mostly be found to pay much more attention to smartness and effect in outside appearance, furnishing, and those other aids to business prosperity which some of our own fraternity are so careless of. He will not be content so long as any possible improvement within his means and power remains unaccomplished, but is ever restlessly seeking to do better. Taken altogether, specimens of the intermediate grade of work under discussion would come as a wholesome surprise to many of us. They are a standing proof that moderate charges are not at all incompatible with a consistently exalted standard.

The cost of living, house rent, and other things are much higher in the States, as are also salaries; but in the case of photographic materials and accessories there is no particular difference, some things, in in fact, being even lower in price than they are here. With increased cost of production against them, it is rather remarkable that the cheaper run of photographers

manage to make their work pay so well. The secret is to be found in their wonderful appreciation of business methods and unfailing grasp of those things which make for success. They do not sit down and wait for it to turn up, à la Micawber, but lay their hands firmly on it, and bring it to them. To reach the conclusion of the whole matter, the lesson, it seems, which our Western brothers should, if we are wise, succeed in teaching us, is that we must move with the times, endeavoring to be beforehand, rather than behind, with the march of improvement, and that we must get out of a habit we are rather too fond of, namely, expecting the cart to move without putting our shoulders to the wheel.

[The preceding account of professional photography as it is done among us, written by an English photographer, is reprinted from *The British Journal of Photography*. It is extremely doubtful whether the English professional is as careful as the American in his technique or in the treatment of the mechanical part of his work. We see no evidence of superiority in these details in the best British work reaching this side. That "the Yankee photographer" generally makes his own enlargements is obviously incorrect, as any one acquainted with the immense business done by our enlarging houses well know. Apart from these points, Mr. Lockett's paper is commendably correct.—ED. W. P. M.]

## WHEN TO USE A COLOR SCREEN.

PERHAPS the greatest drawback in orthochromatic photography is the supposed necessity of using a screen in order to secure the desired effect. Now, it is true that, in order to render correctly the luminosity of objects our plate must be sensitive to the light rays reaching it in proportion to their luminosity, but that is perfect orthochromatism, which (1) has not yet been attained, and (2) may not always be necessary or desirable. Let us, therefore, inquire as to when we should use a screen, and when we may dispense with it, contenting ourselves with something less than perfection of luminosity representation. We know the function of the screen—to depress or subdue the over-active blue rays; we know that the screen need not necessarily prevent us attempting even instantaneous work, though it increases the normal exposure from three to forty times. When can we do without it altogether?

The point is one about which there is considerable difference of opinion. Captain Abney says that the screen is not necessary or desirable when photographing an outdoor scene with plenty of sunlight from a high sun, the sky being comparatively free from clouds, and the atmosphere clear. He continues:

If we take a negative of a landscape on a cloudy day, the lighting is of uniform quality, and screen or no screen will not matter. The results will be very closely identical. When we come to a sunset, however, we have different conditions. The high lights are illuminated by the sun and the sky. Now, in the orange light of a sunset there is very little blue light, and, as is well known, the most brilliant illumination of a setting sun fails to show itself on a plate without a screen on this account. Practically all the photographically actinic light is high light and shadow is sky light. Place a yellow screen in front of the lens, however, and the whole aspect is changed. Considering the sunlight as all yellow, we get on an unscreened plate a ratio of high light and shadow of five to half, or ten to one, with the yellow screen inserted it is seventy to one. The effect of sunlight would, therefore, be shown in the last case, but not in the first. It must not be assumed that the above proportions of yellow to blue represent the facts entirely, but they are sufficient to argue upon. Any of these legitimate factors would lead to the same results.

If we want cloud effects the use of the yellow screen at all times is useful, for while from the clouds it allows the yellow contained in the sunlight to pass, it only leaves a small amount in the blue sky. The consequence is that the white cloud will be much better delineated when the screen is used than without it. When we

have a blue distance the yellow screen is a very useful adjunct to insure its absence.

Charles Ehrman says: When the sun is low, or the light of a yellow color, a screen will not only be useless, but absolutely disadvantageous. The light itself acts as the screen, dispensing with its use in the same manner as in copying oil paintings by a yellow light, where a screen is also dispensed with. It is obvious, therefore, that the use of a screen in photographing landscapes must be left to the judgment of the photographer. It may be said, however, that it is very rarely necessary, and in almost every case an orthochromatic plate used alone will, by its increased sensibility to yellow or red, give a far better effect and a more truthful color rendering than an ordinary plate; and this, of course, is more and more apparent the larger the amount of yellow that is included in the picture. Thus, for instance, the effect is most apparent in photographing a woodland scene in autumn when the leaves are turning yellow, and in this state of affairs a screen is absolutely unnecessary. Indeed, its only effect would be to increase the exposure necessary. As we said before, the only occasion for the use of a color screen in landscape photography is when the violet and blue rays have so pronounced an action upon the sensitive film that their representation in monochrome is out of all proportion to the effect of the color value as apparent to the eye. When used for landscape work the color of the screen should be of a very pale yellow. If too strong, it is liable to give an exaggerated effect—that is to say, the distant parts of a landscape would appear too sharply defined; they would lose all effect of distance imparted to them by the mistiness that lends aërial perspective to the view.

G. T. Harris says: When the photographer is compelled to work in dull weather, with overcast sky, the use of yellow filters aids enormously in getting results superior to those obtainable with ordinary plates. The greens are brightened up, and the distance rendered clearer to such an extent that a landscape photographed with a deep filter under a dull, heavy atmosphere will often have the appearance of having been taken in a good diffused light. This fact alone should make the use of orthochromatic plates and light-filters commendable to the professional photographer, who, indeed, seems the most persistent in ignoring their aid. Another direction in which filters, and notably deep ones, become extremely valuable in the work of the professional photographer, is in photographing buildings in large towns, where smoke, haze, and congested thoroughfares make it almost impossible to obtain good results when working in the ordinary manner. The shadows are covered with gray haze, and the exposure has not been quick enough to avoid movement in the traffic, nor sufficiently prolonged to obliterate it altogether. But, use an orthochromatic plate and a deep enough filter to clear away the haze, the long exposure necessary under these conditions quite obliterates the effects of the traffic, and the result is a photograph with clear shadows and an absence of blurred figures in the foreground.

In landscapes with clouds the light-yellow screen may be used; where clouds alone are photographed a deeper tint will be advantageous, and a slow rather than a rapid orthochromatic plate is to be preferred. In this case an exposure of from one-tenth to one-quarter of a second will be about right. Of course, it will be readily understood that with lenses of large aperture, such as the anastigmats, we can use a rapid orthochromatic plate and a yellow screen fairly full in tint, without a much longer exposure than would be required with a lens working at *f*/8 and a slow orthochromatic plate with light screen or no screen at all. Where this can be taken advantage of the rendering of luminosity values will necessarily be better. With regard to the different cloud forms, some being strongly defined and others having more delicate values, it is obvious that a screen of deeper tint is required for the latter, while a light screen will suffice for heavier forms.

---

*Photography at the St. Louis Fair.*—The suggestion for a special photographic pavilion at the St. Louis Exposition of 1903 has received the approval of the President of the Exposition, David R. Francis, Esq., and the outlook is most favorable for success.

# BROMIDE PAPER.

BY GEORGE LOVELL.

ONE of the mysteries of the photographic world has been the almost contemptuous way in which bromide paper has been treated. It has been left altogether too much in the hands of that class of the young amateur who does not know what is a good print, or of the low-priced photographer who uses bromide paper as a substitute for platinum, and who often is as much at sea as the amateur as to what constitutes a good print. And yet bromide has fallen into this place simply because it is so very easy to work that these incompetent people can get results on it. But I have seen prints in bromide that cannot be distinguished from platinotype and others which are almost *fac-simile* of carbon.

Apart from its known merits for enlargements, bromide paper offers us great latitude—therefore few spoil—and gives us a very wide range of color from that black and white which is sometimes so very beautiful, and sometimes merest "soot and whitewash." Its price is moderate, and it is anywhere obtainable in all sizes. It is invaluable for "rush" work, and, with a proper amount of care bestowed upon it, it is as permanent as a process need be.

Bromide paper can be obtained in so many different surfaces and weights of paper that it is difficult to imagine a subject which cannot be reproduced in one of them; and most surfaces of paper can be obtained in grades for either hard or soft negatives. It may make many photographers smile, but I have for the past two years made almost all the prints for my showcase by means of bromide. I don't remember what first led me to take it up, but I have experimented with it more than a little, almost as though I were an amateur and it was my hobby. I do not make *most* of my prints for customers by this method (I have found nothing yet to beat my favorite Aristo-platino), but I do make quite a few prints by it, and I have found its speed a real advantage in many cases.

I make a point of advertising rush work. I got the idea from a high-priced tailor's advertisement I once read offering mourning goods to measure in a few hours. I don't urge rush as a desirable thing, but in a city like this, where the buying population is a visiting one, I have found that a notice to the effect that portraits can be "delivered to-morrow" brings me quite a little business. Of course, I charge accordingly, for it often means my staying a few minutes later at night, but I find that the line pays, both for the overtime and the advertising.

In another way bromide has proved very useful to me. Four or five years ago I might have obtained the local kodak agency and done quite a trade with summer visitors. But, like so many others, I let the chance go, and it was snapped up by a drug store in the same block. I have regretted my mistake many times the last three years, and have done what little I could to retrieve it. I see no reason why the amateurs who come down here should take all their plates and films back to their local dealers, and so I push for their trade on this same rush basis. And I find that if a visitor really finds out that it is possible to see his prints to-morrow or next day, he will bring his exposures in to me. Many of them are indiscreet enough to take groups of their fellow-boarders, and, of course, if the negative is any good, they often want not one, but several prints.

One thing helps another, and, by my advertising rush work and development for amateurs, I have made myself the best-known photographer here, and get more than my share of the summer. And one of my strongest helps is in the great usefulness of bromide paper. I have tried all the newer papers which can be worked without a dark-room, and which are, I have been told, very slow bromide papers. But I do not care for them; they have not as much latitude as bromide paper, and I don't find them as easy to work.

In conclusion, I would say that if any of my fellow-workers think that it would help business if they could promise prints for to-morrow (at an extra $1 per dozen) let them become acquainted with bromide paper.

# DRESS AND DRAPERY IN PHOTOGRAPHY.*

BY JOHN BARTLETT.

As the beauties of the mind are seen through and adorned by language, so are the graces of the figure set off by drapery.

So wrote Flaxman, the great English sculptor; and is not the comparison an apt one? We are all familiar with his beautiful outline pictures depicting scenes and incidents from the Greek poets and from Dante.

One hardly knows which to admire more, the vigorous lines of Chapman's Homer, or the lines with which Flaxman gives life and motion to his flying and running figures, at times poised in the air or cutting through it with extreme rapidity, or gently and gracefully floating through space, the whole effect being produced by the skilful management of the flowing garments. In many points there is a closer analogy between sculpture and photography than between it and painting.

The horses of the Elgin marbles are without doubt the closest possible copies of well-chosen living specimens. Nothing is omitted any more than in a good photograph of the sharp focus school.

Greek sculpture furnishes many invaluable suggestions for the disposition of the drapery about the human figure, but in our imitation of the antique we must bear in mind that though the analogy is close between sculpture and photography, so far as the realistic presentation of nature is concerned, yet photography, like painting, is more limited in its scope for representation of motion, so that it would be entirely out of place for a photograph, or even a painting, to represent a human figure arrayed in a garment closely adhering to the limbs, showing the form distinctly through it, because the clinging of the garment demands an explanation when the motive of the picture does not suggest motion from the wind or some other agent. We sometimes see photography of human models simulating Greek statuary, clad in close clinging garments but represented in repose, so that one is at a loss to understand why the garment about the lower limbs is shown in a tense condition, while the upper drapery by its placid folds indicates most complete rest. Now, when the antique represents a statue in repose, the amplitude of the folds of the drapery entirely conceals its figure. The statuesque photograph savors much of the sensational, even if it is not vulgar or ridiculous.

It is altogether out of the province of photography to suggest the indefinable beauty of the plastic by whitewashing the real. There are many suggestions about the beauty of drapery applicable to photography to be derived from the painters. It would be a long list if we should mention all the painters who delight us with the grace of folds and hangings, both in the figure and in the drapery of the background. We might point to the flowing robes of Titian's "Assumption," the dress of Da Vinci's "Mona Lisa," to the splendid brocades and satins in the pictures of Paul Veronese, Rubens, Velasquez, etc.

To take suggestions from these masters and from the legion of moderns will be much more instructive than to try to make Galateas, Dianas and Psyches instinct with life, with a well-satisfied expression, clothed in tissue and mounted on wooden blocks, painted white, to look like marble. Greek mythology, beautiful as it is in the poetic significance, has entirely died out of our poetry, though it still lingers in art. We can find pictures in our drawing-rooms, our parlors, our social gatherings, our workshops, in the busy street scenes where there are blouses, frock-coats and flounces, instead of togas and chitons. We can call to mind numerous paintings, mostly by French and American painters, of scenes and incidents of our modern so-called artificial life, quite as charming as mystic maids or inspired shepherdesses.

Of late years there has been a wonderful advance in the art side of photography, but even in some of the most beautiful of the recent productions which have graced our Salons we have noticed a disregard of the value and importance of drapery and costume, or an affectation which suggests

* A paper read before the Philadelphia Photographic Society.

the dreamy sentimentality of the imitators of Rosetti. We must have taste ourselves and go direct to nature and imbibe fresh drafts from the painters who delight in the delicacy of light and shade in drapery and dress. Did the photographer ever stop to consider what grace is added to an attitude in itself graceful by length of line to a robe, and how often grandeur is imparted to a figure, in itself ordinary, by the skill in the disposition of the lines of the folds of a dress. There is a special elegance in the long flowing lines of a lady's habit, more becoming to her native grace than all the devices made of crumpled tissue in which a lady is never seen attired, except when she comes under the hands of the artistic photographer.

It is true that many an ungainly form dissembles under an artfully contrived costume, so that one is tempted to extend the witticism of Talleyrand and say that drapery, like language, is more serviceable in concealing than in revealing. Still, there are those who have so large a share of inborn, or else acquired grace, that the most ordinary garment, like the tarnished gold-laced hat and huge cockade of flimsy taffeta of Uncle Toby, though not worth a button in themselves, become the person the moment he puts them on, and seem picked out by science to set them off to the greatest advantage. The photographer may here retort: But these gentlefolk of nature Sterne speaks of are not nowadays so plentifully distributed.

We are obliged to deal with all sorts and conditions of men, to make the best of what fashion chooses to suggest or the whim of the sitter dictates. We might say in reply, Do as the painters do, or did, to the changes of fashion, and still give us something beautiful. Gainsborough, Reynolds, and others, of a period of absurdity of fashion far above our day, were able to turn to good account the eccentricities of their time. Nowadays no one can reasonably complain very loudly of any lack of artistic feeling in dress. Fashion is controlled more directly by taste, and springs more immediately from the demands of utility and comfort than ever it did before. Dress, however, like new honors, requires the aid of use to make it set well upon us.

When Autolycus appears strutting about in the Prince's dress, the shepherd remarks that his garments are rich, but he wears them not handsomely. Some people are awkward in the most elegant attire, but even ordinary dress on others disposes itself gracefully.

Painters, like photographers, are troubled by ungraceful subjects. There is a picture by Vandyck of a lady who probably persisted in wearing a very outlandish-looking dress, for Vandyck would never have asked her to don such a looking one. If he had given it any prominence in the picture it would have neutralized even his genius. But his skill and taste enabled him not only to get over the difficulty, but also to give us something beautiful. By means of a light ground opposite the light side of the dress, and by help of a curtain which catches and emphasizes the lights near the figure, he has drawn away attention from the uncomely dress and made the effect of the whole picture full and rich to the eye.

He did not have recourse to color legerdemain for the effect, though he was a prince in coloring, but to masterly management of light and shade not beyond the resources of the photographer.

We are all familiar with Richter's picture of Queen Louise, where a positive physical defect is so adroitly neutralized by skilful adjustment of drapery.

In a full-length figure a perfectly plain background is difficult to manage so as to give atmosphere, as if the figure had air around it. Drapery is of great value in such a case, and frequently its disposition suggests relief, and the figure does not look as if it were plastered to the background.

The background may help to relieve parts that need relief and to soften down portions which need a lower tone. You can easily see how it is possible to lose the bad side of the figures in the darker folds of the drapery, showing a different source of illumination without presenting the incongruity so often seen in a figure against a plain background, where the shadow on the ground is made to relieve the high light of the figure.

Background and drapery are closely allied subjects, but we refrain, and shall merely refer to Raphael as a master beyond most others worthy of study both for background, drapery, and dress.

By a syncretism we might pass from a discussion of drapery to the consideration of the artistic value of the nude in photography. But we are on debatable ground.

The nude in modern art rarely, one might almost say never, appeals to the emotions or excites in the spectator any sentiment of enthusiasm, rarely any feeling for the beautiful. What, then, is the reason we see so many paintings of the nude at our exhibitions? Is it because the nude is regarded as the grand style, or does some other motive not so exalted as the motive to paint for paint's sake animate the brush?

It is not likely that everyone who delights in portraying on his canvas the nude figure is possessed of a vulgar, low sentiment to gratify a prurient taste. "Evil be to him who evil thinks," and the painter is not always responsible for the sensual enjoyment of the low-minded.

To the pure all things are pure, and one should remember that there is a difference, as Milton tells us, between sensual and sensuous. The painter and refined spectator may have a sensuous delight in pure animal beauty as displayed in a divinely shaped man or woman. I think the first impression upon a right-minded man made from an exhibit of the nude female figure, either in an admirable work of art (I say admirable because a nude painting fails woefully unless *per se* it is beautiful) or in the actual living creature, is solely a sense of the glorious harmony of relations and the subtle blending of tints of light and shadow. What the afterthought may be when the imagination enkindles an adventitious growth upon the original impression does not concern the morality of the presentation.

The study of the nude is, of course, indispensable for every artist who is anxious to master the numberless combinations of form that nature offers to his consideration. Without a thorough acquaintance with the naked figure in various attitudes, he can never correctly represent the figure in drapery or understand the play of the muscles in the representation of motion. However great his other qualifications, he would fall below the mark and his work be vague and uncertain.

But to paint or photograph the nude for the nude's sake is not right, nay, it is uncalled for and ridiculous to pass it off for art, as a finished production worthy of the esteem or recognition of anyone who delights in the beautiful; and all such pictures painted or photographed merely to show that the artist has technical skill in portraying form, animated by no motive to represent plenitude of power or perfection of grace and dignity, or any poetic sentiment, are apt to pander to the animal tastes of men.

The nude must have its causation in some emotional reason. One need only to turn to Michael Angelo in the grand figure "Night," on the tomb of Julian de Medici, or look at Raphael's "Creation of Eve" and the "Parnassus." We forget while we gaze that these female figures are naked in the glorious conception they engender in our minds. We see in Eve nothing but grace and loveliness, sensuous but not sensual beauty, and added to this that expression of inquiring intelligence on the countenance of the first woman awakening to a realization of the wonders of the creation about her. The imagination is enkindled to a glow of purity, and all thoughts of evil are impossible.

But rarely does our modern art exhibition of the nude create in us any other feeling than a sensual delight enkindling to an unhealthy imagination. What does modern life, to be honest, care about Nymphs and Naiads disporting to display their charms? We have nothing in common with them, not even an imaginative association, for poetry long ago relegated them to oblivion. Bacchantes, Satyrs, Nymphs, Pans, Hamadryads, Odalisques and the rest have no meaning for us, and ought not to be depicted by brush or camera.

---

Mr. E. B. Core, President of the P. A. of A., is an enthusiastic supporter of Mr. Strauss' suggestion for the proper representation of our art at the St. Louis Exposition of 1903. Mr. Core will bring the matter before the Convention for consideration and indorsement by the Association.

## MOUNTING PHOTOGRAPHS ON GLASS.

EVER since glass-mounted photographs threatened to become a boom, and then suddenly collapsed, there has been a steady general demand for this class of mounting. It should certainly be one of the lines of a versatile photographer who is given to varieties and to novelties. A curious fact about mounting photographs in optical contact with glass is that there seems to be quite a little knack attached to it. Some photographers try and fail, and give up in disgust. Others have success from the very commencement, and so cannot understand where any difficulty comes in. In Europe, where some of the smaller photographers make a regular line of "opalines," they seem to be more popular than in this country. They are almost entirely confined to a medium or fairly cheap trade, being of course, eminently suited to sharply focused, considerably retouched portraiture. For the guidance of those who would like to add the opaline to their styles, we give first the commonly commended "approved" method of mounting, and afterward our own method. Either one, given the knack, is very easy, if reasonable care be used. The glass should be as flawless and colorless as can be obtained. Special glass, with the edges bevelled and polished, can be obtained, though for a cheap trade spoilt negative glasses may be used, as described later. Clean as many glasses as there are prints to mount, carefully on both sides, and pile them safely out of the reach of dust. The prints are attached to the glass with a thin solution of gelatine. For this solution soak two ounces of a good, soft gelatine (Nelson's No. 2 soluble we have used) in a pint of water; let it well soften, and then apply heat by placing the jar in a pan of water over a gas or oil stove. Thin the solution down, just before using, until it is scarcely thicker than water, and keep it fairly warm. The prints should be trimmed to the size of the glasses—or a trifle smaller, as they will stretch in mounting—and everything, including the room, should be warm. Take two porcelain dishes, filled with warm water. In one of these dishes lay a glass until warmed through; in the other soak a print until it lies limp and flat. Remove the plate from the water, let it drain a few moments, and then while still wet coat it with the gelatine solution, exactly as though varnishing a negative, using not more than just enough to coat it. Lift the paper from its bath, let it drain a few moments, lay the glass plate level on a piece of oilcloth, and carefully lay down the print on it. It is here that much of the knack comes in in the getting a good contact and the avoidance of air bubbles. Lay a piece of thin rubber or oilcloth over the back of the print, and then with a good, hard squeegee—not a roller one—press it firmly down. Commence with the squeegee about the centre and stroke firmly toward one edge. Then slightly overlap the centre, and make the second stroke toward the other edge. Then two more strokes crosswise. If the squeegee is firmly used a very heavy pressure may be put on without tearing or hurting the print. The heavier the pressure the better, for the print must be in perfect optical contact, and all air bubbles must be squeezed out. The glass should then be sponged around its edge and on its face with a warm, damp sponge or cloth, to remove any gelatine which may have overflowed. Lay the glass in a warm, dry place, print uppermost, until it is quite dry; trim away any edge of the print that may project, and the opaline is ready for further mounting.

Instead of soaking the print in water it may be laid face downward in a dish containing the gelatine solution. When it is limp slide the glass under it, and gripping the corners in register raise glass and photograph from the dish. If this is properly done the paper will bed down to the glass without any trace of air bubbles, and firm application of the squeegee will eliminate all superfluous gelatine.

The picture, squeegeed to an old negative glass, is not finished; there is the rough edge of the glass to be got rid of. Where specially made glasses are used, with the edges ground and polished, all that is necessary is to add a protecting backing board, to which may be attached a strut or a ring for hanging.

When the rough edge is to be covered nothing is better than a passepartout, a narrow binding strip of some neat color,

going entirely around the edges of the glass and attaching it to the backing board. Or a mask may be cut from any suitable paper, giving a more or less broad frame of paper in front of the glass—and well pasted down to it—through which the picture peeps. The paper should be cut large enough, so that the spare ends will fold over the back of the print and hold all firm. This class of mounting gives endless possibilities of choice of paper or design, according to the grade of trade for which it is intended. A very attractive small portrait can often be improved by mounting onto quite a large glass—say put a vignetted head, intended for cabinet, in the centre of an 8 x 10 glass. Let the paper be cut with a not too large opening, and show a generous margin, which will add much to a print. Such a one, mounted with strut to stand on the parlor table, should prove a useful additional line, and would often add an extra dollar to the amount of an order.

## A PRINTING DODGE.

BY F. STANARD.

I DO not know where I first got the wrinkle, but I believe it was from the pages of WILSON'S. But we photographers are very much given to forgetting, for when I have mentioned it to brother workers, it has been new to them. So, sir, I hope that even if the suggestion did come from your pages you will pardon my repeating it, for it is evident that many of your readers have forgotten it.

Now, that so much time is deservedly given to perfecting our prints the suggestion is timely; ten years ago it would have been scoffed at. For years past I have been in the habit of "ground-glassing" my negatives to get detail in the darker parts of a print, instead of letting it all go black. And I often had to do this when the dark parts were of a good printing density, just because some white abnormally hard thing was in the negative, and refused to yield any detail with normal treatment. Now, I accelerate the dense part instead of holding back the shadows.

Place the printing frame in the shade—or it may be *almost* printed out in the sun first—and, with a reading glass, held in the sun, direct a cone of light onto the dense part of the negative. This is a kind of local intensification, and works wonders. Of course, the light must not be focused to a fine point, for as we focus light we also focus heat. Nor should the glass be held still, but the light should be kept moving over the negative. A very few minutes will often suffice to make a wonderful difference in the look of the print. In my hands I find the dodge very practical, so much so, that I often use it purely in a business way.

That peculiar mellow milkiness of a tintype is a difficult thing to handle when we try to make a copy. We get a clear, bright negative, but try as we will we cannot get a workable printing contrast. Of late years I have always "ground-glassed" these negatives to give a little more pluck to the prints, and have then locally forced matters with my reading-glass. At first I spoilt a few prints, but now it works easy and certain. I would recommend that for a first attempt the negative be covered with tissue, with the part to be doctored marked on it with a pencil. I find the usual tendency for beginners is to overdo it.

In taking photographs of babies, alone, we can to a great extent overcome the trouble of the white dress. But when grandmamma holds the baby, the thing becomes more difficult. For in photographing old people we must have a soft negative, and the printing must be just so, or we lose all that we wish to retain in their faces. But by using the glass we can keep the likeness in the old folks, and force matters in regard to the juvenile.

In conclusion, I believe that those who follow this hint will appreciate it, and will find it useful with very many negatives.

# EDITOR'S TABLE.

MR. JOHN CARBUTT, Wayne Junction, Philadelphia, sends to our table interesting results of the testing of his *Polychromatic* plate with the new Chapman Jones Plate-tester. According to these results the *Polychromatic* plate is unusually efficient for the rendering of color values; indeed, the showing is remarkable. In a later issue we hope to present practical demonstration of its value. Meanwhile, those interested in color sensitive plates for portrait or outdoor work should write to Mr. CARBUTT for his circular of special information about the new plate.

---

A NEW edition, revised and considerably enlarged, of the well-known *Seed's Manual* has just been issued, and may be obtained from the M. A. SEED DRY PLATE CO., Lucas Place, St. Louis, or 57 East 9th St., New York. Every photographer anxious to improve in his negative making should get this practical little book.

---

MR. H. A. HYATT, St. Louis, has published for free distribution a clever little booklet with the title *The Diary of Gladys Summers*. The book is brightly written and well illustrated, its purpose being to set forth the pleasures of photography with a hand camera.

---

MR. WILL ARMSTRONG, of Boston, writes that an unusually large party of New England photographers has arranged to go to the National Convention in a special train which will join the New York party near Albany.

---

THE VOIGTLÆNDER & SON OPTICAL CO. has removed to a new factory at 137C West 23d St., New York, where it has larger space for the accommodation of its increasing business. The winners in its recent competition, open to all users of Collinear lenses, are announced as follows:

$15 in cash for the best print, 5 x 7 size or over, showing high speed instantaneous work, to Mr. S. SEAMAN JONES, New York City. Subject: "Trotting Horse Making 2.30 Record;" *f*/5.6, exposure $\frac{1}{100}$ part of a second. Collinear Series II.

$15 in cash for the best print, 5 x 7 size or over, showing time work, one-half second exposure or more, to Mr. GEORGE D. MORGAN, Wilmington, Del. Subject: "Store Interior;" *f*/32, 20 minute exposure by electric light. Collinear Series II.

$10 in cash for the best print, 4 x 5 size, showing high speed instantaneous work, to Mr. GEORGE C. EMBODY, Hamilton, N. Y. Subject: "Birds," at 16 to 28 inches distance; *f*/5.6, exposure $\frac{1}{100}$ part of a second. Collinear Series II.

$5 in cash for the best print, 4 x 5 size or under, showing time work. Subject: "Child's Portrait;" *f*/5.6, exposure over one-half second. Collinear Series II. Mr. FRANK E. BRONSON, Painted Post, N. Y.

$5 in cash for the best print made with Nos. 2 or 3 Folding Pocket Kodak, or No. 3 Folding Weno Hawkeye Camera, to Mr. WARREN E. HILL, Brooklyn, N. Y. Subject: "Bridle Path, Prospect Park;" *f*/6 8, exposure $\frac{1}{100}$ part of a second. Collinear Series III.

Judges: Mr. ALFRED STIEGLITZ, Dr. THEODORE G. WHITE, and Mr. W. W. COMSTOCK.

---

*The American Amateur Photographer* has come into line with an attractive new cover and other improvements. The veteran editor of the *A. A. P.*, our friend Dr. JOHN NICOL, called upon us a few days ago on his way to Point O'Woods, Long Island, New York, where he spends his summer vacation. We were delighted to find Dr. NICOL looking as youthful and as happy as of old, and trust that his summer by the sea may give him still more vim and spirit.

---

BURKE & JAMES, Chicago, have just introduced a new card and paper cutter, which has many valuable points not found in other cutters. A circular will be sent to those desiring it.

---

WE are advised by the C. P. GOERZ OPTICAL WORKS that they have recently turned out the 100,000th *Double Anastigmat*. This is a wonderful record, and speaks well for the appreciation given to this notable lens.

---

THE ROTOGRAPH CO., 101 Fifth Ave., New York, sends us a copy of their new journal, *The Bromide Monthly*, edited by Mr. J. C. ABEL, and illustrated with an actual photograph on Rotograph Bromide paper. A copy of this useful little journal, wholly devoted to the use of bromide paper, may be had by applying to the ROTOGRAPH CO., at the above address.

---

W. J. STILLMAN.—We regret to announce the death of an old friend and coworker, Mr. W. J. STILLMAN, which took place in England early in July. In earlier days Mr. STILLMAN was widely known as an enthusiastic amateur photographer, and his foreign correspondence contributed to this MAGAZINE in the seventies will be remembered by our older readers. STILLMAN'S *Amateur's Photographic Guide Book* (London, 1874) was one of the most popular manuals of its time. In later years Mr. STILLMAN abandoned photography for the literary field and achieved therein considerable fame. From 1875 to 1896 he served as a special correspondent for the London *Times* at Rome and elsewhere.

**Actien-Gesellschaft fur Anilin-Fabrikation, Berlin, S. O.**

Photographic Department.

Use

# RODINAL, Patent Developer.

**Does not produce fog or stain when development is forced.**
**The most effectual and economical developer extant.**
**Can be used over and over again until exhausted.**
**Is easily controlled with water.**
**Unequalled for Portraiture.**
**Unequalled for Landscapes.**
**Unequalled for Under Exposures.**
**Unsurpassed for Correct Exposures.**

Trade Mark **For Rapid Development. For Slow Development.**
**For Brilliancy. For Softness. For Detail. For Gradation.**
**For Bromide Paper. For Plates. For Lantern Slides.**

Diluted with twenty to thirty times its volume of water, it is ready for use.

| 3 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $0.60 | 1.10 | 2.00 |

Mr. Leipper writes in the **British Journal of Photography** (28th December 1900) as follows:

"**Rodinal** is the sodium salt of para-amido-phenol dissolved in a concentrated solution of sodium sulphite. It keeps very well, and is convenient in use, simply requiring dilution. **It is the most powerful developer known,** and is about the best for extreme under-exposure. **After having tried this developer, one is not inclined to develop under-exposures for two hours with a pyro-ammonia developer of strength one quarter-grain per ounce, when the same result is got in twenty minutes with Rodinal.**"

## Pamphlet on Developers (2d edition 1900)

containing in 20 pages detailed description and instructions for use.

**Free on application**

through all dealers or through the following importers:

**E. & H. T. ANTHONY & CO.,**
122 & 124 Fifth Avenue, 17th and 18th Streets, NEW YORK.

**MALLINCKRODT CHEMICAL WORKS,**
ST. LOUIS, MO., and 90 William Street, NEW YORK.

**THE SCOVILL & ADAMS CO., OF NEW YORK,**
3 & 5 West 19th Street, NEW YORK.

**GEORGE MURPHY,**
57 East 9th Street, NEW YORK.

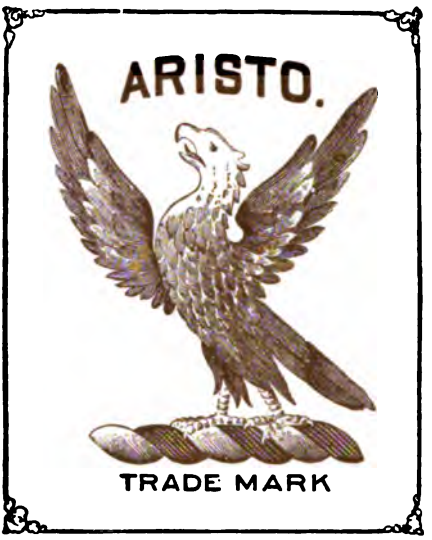
**G. GENNERT,**
24 & 26 East 13th Street, NEW YORK.

Eikonogen. Amidol.

Imogen. Diogen.

**Sold by all dealers.**

1889




1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

FA 6615.545

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 537.
SEPTEMBER, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY, MONTHLY: ILLUSTRATED.

OFFICIAL REPORT OF THE NATIONAL CONVENTION:

ADDRESS BY MAYOR MAYBURY . . . . . 330
ADDRESS BY PRESIDENT CORE . . . . . 331
VICTOR PREVOST. By W. I. Scandlin . . . . . 333
CHARACTER STUDIES OF THE OLD MASTERS. By Pirie MacDonald . . . 336
PHOTOGRAPHY AT LOUISIANA PURCHASE EXPOSITION . . . . . 340
ADDRESS BY W. M. HOLLINGER . . . . . 343
PICTURES THAT LIVE. By A. H. Griffith . . . . . 345
THE ELEMENTS OF COMPOSITION. By Lucius W. Hitchcock . . . . . 347
REPORT OF WORLD'S FAIR COMMITTEE . . . . . 350
ELECTION OF OFFICERS . . . . . 354
BUFFALO SELECTED FOR 1902 MEETING . . . . . 354
MY EXPERIENCE IN TWELVE STUDIOS. By F. Dundas Todd . . . . . 355
PRACTICAL PHOTOGRAPHIC CHEMISTRY. By Milton B. Punnett . . . . 359
CRITICISM OF PICTURES By L. W. Hitchcock . . . . . 365
HOW TO MANAGE A GALLERY. By A. H. Griffith . . . . . 369

SELLING PRICES . . . . . 369
THE VIGNETTE. By A. Lockett . . . . . 370
PRACTICAL ADVERTISING. By Charles P. Marshall . . . . . 373
ARTISTIC PHOTOGRAPHY FOR REPRODUCTION . . . . . 375
NOTES, CURIOUS AND INTERESTING . . . . . 376

OUR PICTURES:

"Roses." From a Photograph by N. C. Hawks, San Francisco.
Portrait Supplements from Photographs by D. Rosser Studio, Pittsburg, Pa., and L. F. Jansen, Buffalo, N. Y.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N. Y. POST OFFICE AS SECOND CLASS MATTER.

There are many photographic journals; some of them are better—more useful—than others. But no photographic journal published gives the practical photographer so much new and useful information about his daily work—its methods and manipulation, its business and its artistic possibilities as WILSON'S PHOTOGRAPHIC MAGAZINE. Take this number as a practical demonstration; compare it with any photographic paper published anywhere, and you will agree that WILSON'S is incontestably the best of trade journals for the photographer who wants to know and to grow.

Three dollars paid in advance will bring you twelve numbers of the *Magazine* as good as this. Where can you get better value for your money? One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON

287 Fourth Ave., New York

ROSES

By N. C. Hawks, San Francisco

# WILSON'S PHOTOGRAPHIC MAGAZINE.

[illegible]

[illegible]

## THE [illegible] CONVENTION.

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. SEPTEMBER, 1901. No. 537.

## THE DETROIT CONVENTION.

THE Educational Convention has come and gone. Although it was somewhat long-winded, it was one of the most interesting conventions yet held by American photographers. The complete *verbatim* report which follows will give our readers a comprehensive survey of the proceedings from beginning to end. In this report the photographer will find food for thought to occupy him profitably throughout the year.

President Core and his associates laid their plans well, and deserve congratulations upon the complete success of the affair. We do not remember any convention, with the exception of that held in Buffalo, in 1873, so full of varied interest, profit, and instruction. And we believe that it will be a difficult undertaking to make the Buffalo Convention of 1902 surpass that recently held in Detroit.

The bold reform which abolished all class or sectional restrictions together with medals and prize awards was completely vindicated. Never before in the history of the Association were so many pictures exhibited showing so high a standard of artistic quality. In our October number we hope to give a detailed review of the more important works shown, so that our readers may cover this department almost as completely as if they had visited the exhibition in person. A few personal impressions of the convention are also held over until next month.

There were a few complaints that the pictorial exhibits did not sufficiently touch the every-day work of the photographer. It is possible that the introduction of a special class of some sort, which shall be devoted exclusively to cabinet portraiture, might be an acceptable feature of the forthcoming meeting at Buffalo. But it cannot be gainsaid that the exhibition at Detroit was an inspiration to all fortunate enough to view it in detail.

There is no question but that the Educational Convention amply satisfied all expectations. In point of numbers it surpassed the Celoron meeting and nearly equalled the attendance at Milwaukee, while there were many causes which contributed to make the quality of the attendance more representative than either of those gatherings. The atmosphere of good-fellowship was not marred by a single untoward incident, and such was the magnetism of the universal good feeling prevailing that everybody caught the infection, even the newspapers of Detroit. They all had the "So-Happy-Being-Pleasant" fever. The Detroit *Tribune* in its closing article says: "In point of enthusiasm, attendance, excellence of exhibits, social and educational features, the convention just closed is conceded by all to have surpassed every previous gathering."

The keynote sounded by Professor Hitchcock and Mr. Todd, of discriminative criticism, was fully in accord with the policy so successfully inaugurated and carried out by President Core.

We predict that future meetings of the P. A. of A. will show a definiteness of aim and purpose hitherto absent. The idea that will no doubt control is one that has been practically and successfully demonstrated by the Boston Brush and Lens Club. While there may be many minor details which, as applied to the national organi-

zation, have still to be worked out, there is not a shadow of doubt that therein lies a well-marked pathway of progress along which will come the development of photography in America, which as yet is only on the threshold of its usefulness. We do not desire to intrude any unwelcome suggestions upon the management of the P. A. of A., but believe that one way to further amplify the educational feature would be to incorporate in the programmes three departments or *sections*, to be known as the *art section*, the *technical section*, and the *business section*. It is suggested that in the preparation of the programme for the next convention a committee be appointed for each of these sections respectively, the duty of each committee being to arrange a special programme for its own section. One-half of the morning session of the second day might be given to one of these sections; one-half of the second day's session to another section, and one-half of the third day's session to the last section, the remainder of each morning to be given to the reading of papers on general topics, general discussion and routine business. The respective sessions might be opened by a paper by a prominent photographer, to be followed by a general discussion, the time to each speaker being limited, so as to bring out pithy suggestions. This plan has been followed with profit in many other conventions, and might at least be given an experimental trial at Buffalo in 1902.

## THE NATIONAL CONVENTION—OFFICIAL REPORT

THE Twenty-first Annual Convention of the Photographers' Association of America was held at the Light Guard Armory, Detroit, Mich., August 6th to 9th, inclusive, under the leadership of President E. B. Core, of New York.

### FIRST DAY—MORNING SESSION.

After calling the assemblage to order and announcing the formal opening of the convention, President Core invited the ex-Presidents in attendance to seats on the platform. The following ex-Presidents responded to this call, viz.: Clarence M. Hayes, Detroit; Fitz W. Guerin, St. Louis; E. Decker, Cleveland; W. H. Potter, Indianapolis, and G. Cramer, of St. Louis.

President Core: I have the honor and pleasure to announce this morning that we have present the Mayor of Detroit, whose fame as an orator has reached far beyond the confines of the beautiful city of Detroit, and it will be our privilege to hear from him. (Applause.)

*Address by His Honor, Mayor W. C. Maybury.*

MR. PRESIDENT, LADIES AND GENTLEMEN: I do not know from what country your President hails, but from that introduction I assume that he is an Irishman. You know an Irish introduction consists in throwing a blanket over your speaker before you get him to the front. And I am sure his more than complimentary allusion has had that effect upon me. You are welcome to the city of Detroit, and if you do not realize it now, I am sure you will when you have been with us long enough for us to make you feel and know how welcome you are. I will say to the gentlemen that they are welcome in a special manner, because they have brought their ladies with them. We like that, like to have our friends come and bring the ladies of their household with them. Of course you will understand that I am a little selfish in that, because being unmarried I am personally glad to see the ladies here. I do not know, you see, but possibly my opportunities may be extended somewhat, as I have not been able to do much in Detroit, and possibly from outside somebody may come and claim me!

You may possibly be somewhat confused from the fact that we have various times here. We are ruled here as a people by sun time; and there is also railroad time, which is 28 minutes slower. Now I want to say to you that we want you to come to us by the sun time, and go away by railroad time (applause), and while you are here have a good time. (Applause.)

This gathering is peculiar to the times in which we live. Such a gathering as this would not have been possible in years gone by. In the olden times when a man discovered any particular art or advantage in trade or in business, he kept it as a secret. If Daguerre and Talbot were here to-day—the founders of the two arts which have made this beautiful art what it has become in the world—they would be surprised to see with what absolute freedom you are exchanging ideas.

This world has been made rich and poor a thousand times by the selfishness of people. Remedies for diseases have been found by men, and then carefully kept as secrets from the world. Had such a man as Pasteur lived three hundred years ago he would have surrounded his great discovery of a cure for rabies with the greatest secrecy; he would have said to those afflicted or in danger of infection with this terrible scourge to come to him, and in his peculiar surroundings of his peculiar art he would have applied his remedy to their diseases. But Pasteur lived in an age when he was ashamed to preserve his discovery in secrecy. It would have made him seem small and contemptible among his fellow-men, and the world would have demanded of him that if he had any such cure which would assist the afflicted and allay their misfortunes he should make it known; that it was his grand duty to come out and tell the world of it. This he did freely; but in ages gone by men were permitted to save these arts for their own emolument. A physician if he had a cure for a disease simply transmitted it to his son, perhaps; or, failing in offspring it died with him; so I say to you that the world in all its relations has been rich and poor a thousand times. Arts have risen, flourished, and passed into decay; and we simply read the visible evidence of their existence in the pile of brick or stone which tells us how they lived and how they died.

The world can never become so poor again through lost arts, because the best you have to give to the world you bring here and exchange with others who receive in return from you; so we say you are welcome to Detroit. I can say with a feeling of gratitude that we are the gainers, my dear friends, for people like you cannot come to a city and exchange ideas and discuss your art without our being benefited also. We shall know more of it. We shall see what we could not have seen had it not been for you and your coming here. Even in the few minutes I have been in this hall I have walked around and witnessed what I never saw before, looked at pictures, seen processes, and heard them explained which never would have come within my ken were it not that you are assembled here. So when I say that you are welcome I am not using mere perfunctory words. It is expressed with gratitude. I thank you for having come. It is with that spirit that I welcome you who represent this art which is now taking such a place in the great field of the world's activities; for has not the art of photography spread mightily in the last twenty years? See where it goes. It is employed almost daily in many of the institutions that I have the pleasure of controlling. It is the man and the woman with the camera who are taking pictures that show what the eye would lose sight of, what the eye would not see, or not preserve in memory; and so in every institution of any size there is a camera to produce and preserve such records. Not only in this respect is it a useful art, a beautiful art, but it is commercially valuable as well.

There was a time when you could judge a man by his language, by his walk, by the way he acted; you could mark him, and say, that man is a pedagogue, a teacher; you can see it in him, and he carries the evidences everywhere with him. In like manner a doctor or a lawyer could not conceal the profession out of which he made his living. The profession was greater than the man! That day has gone by, and to-day men are greater than their profession; and just for that reason the professions never were as great as they are to-day, because they are filled by men who are broadminded, who are skillful in the particular things which they are doing, and are also at the same time men of the world. They are not narrow and prescribed in their ways. Look upon this assemblage! I see everywhere the evidence of thought, care, skill, intelligence. To what is it applied? I have but to go up stairs and see there the result of your experience to tell from whence you come and who you are.

So the world has become broader and better and stronger; and in fact has become small for the race of men to-day, as it was large for the men of a hundred years ago. It is small to-day because men think nothing of compassing the globe nowadays in their travels.

Now, my dear friends, men have begun to learn that after all it is not merely existence that makes life. You have elevated your art to such a place that the world cannot get along without you. The walls of every cottage and palace alike say that you are here. The touch of your skillful hand, the inspiration of your intelligence, is making things beautiful. Thus there is a pleasure in life to you, aside from the support which you gain by this beautiful art. You are a comfort to others, and the world is made more beautiful, more tolerable, because you are here. This is an incentive to life. Beautiful pictures have become so easily within the means of everyone that the cottage is almost as beautiful as the palace; and all this has been brought about by men who exchange ideas and whose grandest idea is that in their art becoming greater they also become greater.

To this old city, now entering upon its third century, I again bid you welcome. I noticed as I came along the street this morning that the people all looked happy. Do you know the reason? The gentlemen are among us whose constant admonition is, to "Look pleasant!" (Applause and laughter.) We have all got on our pleasant smile to-day. How I wish that the photographer had been in existence on the day when the first gentleman was in the Garden of Eden! If we could only have a snap-shot of him when he was mean enough to call attention to the fact that that one lone woman tempted him, the race of men would be the better for it! (Applause.)

Poor old Adam! Placed in such a temptation there is not one of us that would not have stood up and lied like a gentleman!

A final word: Our city is laid out peculiarly, and sometimes people need a guide. Other cities have gentlemen dressed up in blue, with a billy club, whom they call policemen We have people dressed the same way here, but we do not call them by the same name. We call them "guides," to see that people can get around; and in order that none of you may lose the location of the streets, just stop any of them when you are in trouble, and simply say, "Look pleasant," and he will take you to the haven where you want to go. I thank you. (Applause.)

The Chair: I am sure that all of us who have listened to his Honor the Mayor feel as I do, that out of the usual custom in dining, we have taken the dessert first, or at least we have gotten a goodly portion of it. [Applause.] I feel that the thanks of this Association are due to the Mayor for the very hospitable and more than complimentary manner in which he has received us. I am afraid some of you will not be able to wear your hats after this; but I think a motion would be in order that we extend a rising vote of thanks to Mayor Maybury for his great hospitality and kindness. The motion met with a strong second, and a rising and unanimous vote was given with alacrity.

The President made some announcements in regard to the programme for the morrow, and the theatre party for Tuesday evening, tendered by the manufacturers, after which he gave the President's annual address, as follows:

### *Address by President Core.*

"If you will tell me whom you are going to appoint for judges, Mr. Core, I shall know how to make my pictures for exhibition next year."

Such, gentlemen of the P. A. of A., was the first remark that greeted the ear of your President after you had honored him by your choice at Milwaukee last year.

The question was proper enough, natural enough. My purpose in introducing it to your notice was not to criticise the person who made it, but because it touched within me a chord that moved me mightily, and seeks for expression to-day.

Why do we go to the trouble and expense of preparing pictures for an exhibition?

Why do we exist as an Association? In a word, what is our real purpose in making pictures?

Now, I believe these are fundamental questions, worthy of careful consideration on the part of every one of us, and, as I feel there is possibly some difference of opinion among us on the subject, I will ask your attention to what seems to me a reasonable view of the case.

First, then, I would take pride in pointing out the fact that there is some mighty power at work stimulating the best efforts of the best men in this noble art of ours. This is amply proven by the history of the advance that has been made within the last fifty years, which is full of gratification for the past and abundant promise for the future.

I have in my possession an old paper negative of a scene in Broadway taken only fifty years ago. That negative required an exposure reckoned *by minutes*. Think of the changing shadows; compare it with the possibilities at our hand to-day, with which we are all familiar.

The photographic convention of ten years ago dwelt on posing, lighting, and chemical effect. Compare this with our manner of looking at the work to-day on these exhibition walls, and tell me if I am right in saying that there is no art at the present time more full of inspiration than our own.

How can we best make sure to attain our proper place in the successful advance? What should be the principle

actuating us to make our every effort tell in our daily work?

How can the Association best aid me? How can the Association most surely become a more and more potent factor in this most important piece of twentieth-century progress?

Many persons possibly think that by gathering together at our conventions as many photographers as possible, each jealous of his neighbor's success, and each hoping in a prize competition to so please the judges as to secure for himself the prize which another covets, we shall best advertise our business and bring about the advancement of our trade. It is a favorite maxim that "competition is the life of trade." Yes, possibly, gentlemen; but are we not engaged in something more than trade? Tell me who has done most in photography, the man who has very possibly built up a large business by cheapening in every way the means of production, so that his published list of prices draws trade of a kind without much regard to the quality of the work given them, or the man who strives to improve the result of his labor by a constant aim at the very best, who is sought for by those to whom quality is more than price, and who never loses a patron when once he has found him? I say unquestionably the latter.

To the man with the ever-unsatisfied ambition to make the best work in the best way, the eyes of that mighty army of photographers who cover the face of the globe are ever turning for new ideas, new ways of excelling, and new methods of producing work.

And in like manner, the man who is never content with anything but his very best—no, let me rather say, better than his best—that man is constantly stirring up the public to desire something better than that which satisfied them before, so that they, by his means, become a stimulus to better work. The very best that I am capable of—and that best improved upon—must be my aim. I maintain that this standard in my studio, in my profession, in my business—if you wish to call it that—will not only do most to enable me to build up a profitable income, in which to find substantial profit as well as pride, but will also do most to ennoble my calling, and continually aid in bringing to life more and more of those wonderful secrets which photography holds in concealment; and, furthermore, will do most to ennoble us and make us not only well-to-do men of business, but enable us to earn a well-deserved means of support, and place us among the very foremost of our fellow-men as having added to the sum of human happiness and helped to benefit mankind.

And now, gentlemen, if I am right in this—and there will surely be no dissenting voice—let us proceed to consider how our Association can best serve to develop this aim.

First, I would say that the very fact that our Association has been organized is a good thing, because of the demonstration of the fact that we need one another's help. We are not in this world merely for ourselves; I need my neighbor, and my neighbor needs me. I need him for protection if nothing else. Our forefathers gathered close communities for protection from their enemies, thereby establishing a friendship, while, perhaps, other considerations might have kept them apart. There are many points where we can protect each other. I shall only mention one, because I think it the important one—the copyrighting of photographs. A photographer is as much entitled to all the benefits that come from the work of his brain as the inventor or author.

Our present copyright law is, as you know, rendered inoperative by the condition making it obligatory for the plaintiff to find prints "in possession." Our only hope of having this defective law remedied is in the influence of members; so our copyrights need the Association. The photographer needs to copyright, hence the photographer needs the Association; it makes no difference whether he seems to have reached the top of the ladder, and I feel, mayhap, at times as if I were not only at the bottom, but in a great hole beneath the lowest round. No matter, the strength of a structure depends upon the substantial character of every one of its parts. The Association needs me quite as much as I need the Association. The Association wants the best I can give it. It wants me. Just as no two faces in this interesting audience before me are quite alike, so the work of no two men will be quite the same. There is individuality in work just as there is in form and physiognomy. It is that individuality—that character—that tells in the race for life. It is that same mysterious personality that makes your very presence of value here; that makes the Association the better for your coming. We want the fullest interchange of ideas; we want the warmest grasp of each other's hands; we need to emphasize the importance of the widest possible membership. The East needs the West; the North needs the South. All are welcome, from the northern boundaries of Canada to Mexico, not only because they are fellow-craftsmen, knit together by a common intent, but we need their influence, their thoughts, and their experience—the stimulus which their taking the time and trouble to come brings.

Indeed you are welcome, from whatever section of this wide land you come! Welcome, because we know we need you!

We also hope to do you good. Does not this give the keynote to what ought to be the motive of our exhibition?

Are we school-boys, seeking merely to satisfy our examiners by the work which we present for their inspection? perhaps win some token of their esteem if we especially please them; or are we men, filled with the thought that we can accomplish something which shall be our very own; our own, because we have used all the whole world could give us, with the most faithful skill and labor we, on our side, can give? And this, our best work of the past year, is to be our contribution to the best work of the world, lost sight of, perhaps, in the midst of such a truly marvellous display as we have this year; but none the less bearing its witness, and next year to be improved upon—improved by all I have learned at Detroit to-day, and possessing its distinct, though possibly unnoticed and unremembered share in the general improvement

Our exhibitions, then, brothers, let us ever strive to improve. We must seek to draw our inspirations for our most noble profession from every source. We shall never be content to search for novel and fanciful ways of dressing up old ideas to attract attention, perhaps a passing fame. We want real art, art that shall endure even while we ourselves strive to improve upon it.

I take special pride in calling your attention to this great exhibition of reproductions of the old masters, most kindly loaned by Messrs. Brawn and the Berlin Photograph Co. I don't know where or when you could have seen this collection before, prepared as it is for our special benefit. Here we shall see portraits that live to-day after hundreds of years. Live, because they are worth living.

Study them, gentlemen, and enjoy for yourselves the pleasure they have given generations that have passed away. And while we seek inspiration, and expect it, and thank the Ruler of the Universe for every other fellow's success, striving to make it our own, let us remember that it is hard work that tells; work, indomitable work; work that really counts in the long run every time.

There are in this august assembly scores of self-made men—men who have succeeded and are great to-day, whose names are known in every civilized land, all because they were not afraid to learn to work and to work to learn.

And if some of you feel the pressure of grim necessity ever upon you, the need of earning cold money out of your toil, instead of seeking other apparently speedier ways to fame, let it not for one moment dishearten you; rather thank fortune that you feel that stern incentive to prove your mettle, which has so often in the history of our country been the impelling motive to enterprise and labor on the part of men who are to-day recognized as great.

The Chair: The next feature on the programme will be presented by a gentleman who needs no introduction, Mr. W. I. Scandlin, of *Anthony's Photographic Bulletin*, whose influence has permeated all your studios, and no doubt most of your homes. So I will simply say that Mr. Scandlin will now give a lecture on Prevost's old negatives. [Applause.]

Mr. Scandlin: Before commencing my address I wish to voice my appreciation of two things for which I am grateful and which have been kindly looked after by the

Committee of Arrangements. The first is that the slides which are to be shown later to illustrate a part of my address, from the old paper negatives of which I shall tell you, are to be thrown upon the screen by one of the oldest—probably *the* oldest—photographers in the United States, Mr. Jex Bardwell. [Applause.] He is known to every one who knows anything of photography and has been actively connected with the photographic art since 1844. The second matter for which I am grateful is that I am followed on the programme by Pirie MacDonald, and shall trust to him to hold the audience for me through my talk. [Applause.]

### Mr. Scandlin's Address.

### *Victor Prevost, Photographer, Artist, Chemist—A New Chapter in the Early History of Photography in This Country.*

Mr. President, Ladies and Gentlemen: It is seldom in the history of an art no older than ours that important specimens of its early progress have been wholly lost to sight for a period of fifty years, and still more remarkable that so little is known and recorded in photographic history of the man who probably introduced the wax paper process into this country, and who certainly left behind him results of surprising beauty and perfection; and who, either satisfied with the results of his labors, or lured into other fields of scientific investigation, apparently dropped out of photographic ken almost as completely as if he had never lived. It is to me a matter of increasing wonderment that such a man could have lived an active life in New York City until so late a date as 1881, and that after a lapse of only twenty years he could so completely have disappeared.

I have, therefore, a double pleasure in bringing before you to-day what I believe to be some of the most remarkable specimens of early photography in existence—a double pleasure because I am permitted to place before the most representative body of craftsmen in this country a unique collection of the work of a pioneer, which, notwithstanding the fact that it was made while photography was in its earliest infancy, yet in point of artistic excellence, technical qualities, and all-round photographic perfection can hardly be excelled to-day—and also, because in so doing I am enabled to pay my humble tribute of appreciation to the genius and ability of a man whose accomplishments in the field of photography deserve a much higher meed of praise and recognition than I alone am worthy to bestow, and I hope that before this convention adjourns some action may be taken in recognition of the results obtained in photography by Victor Prevost in the early fifties.

I would add, that if this association had a permanent place of meeting or a National Gallery of American Photography, I should esteem it a pleasurable duty to present to it a representative collection of these negatives as establishing an important link in the history and development of photography, and as an incentive to further progress. Before going further it is important that we briefly compare this collection of Prevost negatives with others of early date in this country of which we have any knowledge.

There is in the Harvard Library at Cambridge, Mass., a small collection of Talbotype negatives, numbering, I believe, less than half a dozen in all, made by Prof. Josiah P. Cooke in 1847, and measuring not larger than about 4 x 6 inches in size; and in the Smithsonian Institution at Washington, the Assistant Secretary informs me that "the museum contains about twenty paper negatives by the Talbot process, including one made by Mr. Talbot himself, the others being the product of the Langheim Bros. and Mr. Alex. Beckers. These negatives were, as is customary, waxed after the pictures had been made. The collection contains only one negative by the Le Gray process. This is about nine inches by eleven inches and represents a view taken in New York City showing the studios of Mr. Root and Mr. Brady." This negative originally formed a part of the present collection, and at my suggestion was presented to the Smithsonian Institution in 1898, when these negatives were brought to light.

These two collections, together with a few specimens in the possession of Professor Chandler, of Columbia University, are all, outside of the Prevost negatives, of which I have any knowledge.

The collection in my possession numbers considerably over a hundred negatives on paper, made by the Le Gray process, all direct from nature, and measuring mostly 10½ x 13 inches; several, however, are as large as 15½ x 18 inches. There are also a number of negatives, copies of paintings, engravings, statuary, etc. Many of these negatives are signed and dated, the earliest one bearing date of 1851, and others 1853 and 1854.

In almost all cases where the dates appear on these negatives they have been verified by reference to directories, and in many cases also by the memory of persons still living. In this collection were also a few pieces of the prepared paper, ready for sensitizing, and a few prints, some made on plain and a few apparently on albumenized paper. (The lecturer here showed one of the negatives unframed, with signature and date, a piece of the paper unsensitized, and called attention to several prints hanging on the walls.)

Bearing in mind the date of the first negative in this collection, 1851, let us see what was the condition of photography in this country and in Europe when it was made. The beginning of photography may be credited to Daguerre, and its date named as 1839, as on January 7th of that year he communicated his success to the Academy of Science of Paris, daguerreotype plate being a positive and not possible of duplication.

On January 1, 1841, Fox Talbot gave before the Royal Society of England a full description of his process for obtaining, not a positive but a *negative*, upon paper, this process, patented September 20, 1841, under name of Calotype, and consisted in coating and sensitizing paper and rendering it translucent with wax *after* development.

In 1846 gun cotton was made known by Professor Schönbein, of Basel.

In 1847 collodion was first made, by dissolving gun cotton in ether and alcohol, by Mr. Maynard, of Boston, Mass.

In 1848 albumen was first employed for making negatives on glass plates by M. Niépce St. Victor, whose process was published June 14th of that year.

In the autumn of 1849 Frederick Scott Archer first made collodion negatives. Gustave Le Gray, of France, had meantime been experimenting along these lines, and published in 1850 a practical treatise on paper and glass. This book is said to contain the first printed notice of collodion being used in photography.

Le Gray's process differed from Talbot's principally in that the paper was waxed *before being coated*.

Prof. John Towler says, in the *Silver Sunbeam* (page 171, edition of 1879, London), referring to improvements on Fox Talbot's Calotype process: "Among all these improvements and extensions, the waxed paper process of Le Gray is the most extensively employed. It presents undeniable advantages in portability of material and liability to fracture; the wax, too, is a decided preservative of organic matter against the action of nitrate of silver." . . . .

"It differs from the Calotype inasmuch as the paper is first waxed before sensitization in Le Gray's process, whereas in Talbot's the waxing part of the operation is the last."

Referring to exposure he says: "The time of exposure, of course, is variable, according to temperature and the brilliancy of the light. Two or three minutes in a good light will in general be sufficient; in ordinary light on an average from ten to fifteen minutes will be required."

He tells us that the waxed paper "is ready for use immediately after being sensitized, or at any time within twelve days," also, that the operation of development "may be performed right away or at any time within twenty-four hours." "In extreme cases," he says, "the development may be postponed for a week; but the best results are obtained by developing immediately after exposure."

It was just about this time, 1851, the year in which the first dated paper negative in the collection before us was made, that glass plates and wet collodion were being advocated, and we find in the *London Art Journal* of about the beginning of 1851 the following item concern-

ing glass plates, from the pen of Robert Hunt, who says: "They offer such perfect transparency, and manipulation upon them will be found to be really so easy, that we doubt not they will be generally be employed." (*Photographic Art Journal*, April, 1851.)

He also says in a later number of the same publication, about July of 1851, writing of recent improvements in photography: "The use of collodion promises to be of exceeding importance."

A few other extracts from the early photographic press will, I think, be interesting as establishing the importance of the paper process, the permanence and beauty of which you will be able to pass upon yourselves by examination of these negatives to-day.

James How, in *Humphrey's Journal* of July 1, 1854, says: "In the present paper I propose to confine myself to the waxed paper process which, although not at present in general use, will, I feel confident, eventually, when brought to perfection and properly appreciated, be generally used for views, while collodion will be as universally employed for portraits." . . . Continuing, he says, "I hold this opinion of the value of the waxed paper process for the two following reasons: First, it is obvious that the thinner the paper used for the negatives the sharper the picture will be in the positive when printed from. In the Talbotype process, very thin paper cannot be used, since it would be too weak to allow the many and frequent washings necessary, but this process of waxing imparts a horny character to the paper, making the thinnest very strong without increasing its thickness. It may then be washed, soaked, and rewashed for even several days if required, without the slightest fear of injury. And secondly, the paper so prepared can be kept after it is made sensitive and ready for the camera, without deterioration, for from ten to fourteen days, while that prepared by the Talbotype process can only be kept for about as many hours."

He further says, speaking of his method of working it: "Twenty minutes and even half an hour have generally been required for obtaining the impressions, but I have lately succeeded with a 3-inch Voigtlander Lens of 16-inch focus in obtaining first-rate negatives with perfectly black skies, which require no painting out, and the whites quite clear, the half-tones also quite perfect, with five minutes' exposure in the camera. It, therefore, appears to me quite certain that no process will be able to obtain precedence of this; from the beauty and sharpness of its pictures, the very valuable non-deteri rating quality of the excited paper, considered in connection with the fact of so short a time comparatively of exposure in the camera being required to complete the impression."

F. Townshend, in *Humphrey's Journal* of January 1, 1855, says: "I myself, began with Le Gray's process soon after its publication, and with others experienced its uncertainty and tediousness as regards length of exposure."

He then proceeds to show how he made good what Le Gray professed to do, namely, "To produce a picture equally good after twenty seconds or fifteen minutes' exposure, to overcome solarization and to combine rapidity with certainty and excellence."

"S." in *Humphrey's Journal* of July 1, 1856, says: "Notwithstanding the great improvements lately made in the Calotype, I think the waxed paper process will one day supersede it." Continuing, he says: "As showing the advantages of the waxed paper over the Calotype, the keeping qualities of the waxed paper are of the greatest value; who does not remember some stained view taken by the Calotype process, which, in development in the evening, was found to be utterly spoiled from the paper being kept twelve hours? With the waxed paper you may take a tour for a week, having a portfolio of sensitive paper, without either chemicals or dishes, developing all when you return home, and not having one spoiled from being kept too long. Again, you can get splendid effects in foliage and dense shady places, while in the Calotype the lights and shadows would be in too strong contrast to give a true representation of nature.

"On the other hand, the longer exposure required in the wax paper process is a great disadvantage."

Charles A. Long, in a carefully prepared paper before the Liverpool Photographic Society, December 2, 1856, is quoted as saying:

"For subjects where texture, gradations of tint and distance are required, there is nothing, in my humble opinion, to compare with a good picture from a Calotype or waxed paper negative."

After reviewing the Calotype process and suggesting methods of improvement and simplification, he says: "Of all the paper processes, perhaps there is none other that has yielded such certain results in the hands of the uninitiated as that on waxed paper, and there is no other process which bears on the face of it so much complication."

Le Gray's process, as originally presented to the French Academy of Science in 1851, is as follows:

"Keep virgin wax, melted at a temperature of 100°, in a large dish; plunge the paper therein, and let it remain until it becomes completely imbued. Then withdraw it, and, after placing the sheet between several folds of blotting paper, pass over these a moderately hot iron, which effects the absorption of the excess of wax by the blotting paper. A sheet well prepared presents no glossy point upon its surface, and possesses a perfect transparence. This waxed paper is plunged into a hot solution of

| | | |
|---|---|---|
| Rice water . . . | 1000 | grammes |
| Sugar of milk . . . | 40 | " |
| Iodide of potassium. . | 15 | " |
| Cyanide of potassium . | 0.80 | " |
| Fluoride of potassium . | 0.50 | " |

"After letting it remain half an hour, withdraw the sheet, and dry it by hanging it up by one of the corners. The sheet is then plunged into a clear solution of acetonitrate of silver, formed by

| | | |
|---|---|---|
| Distilled water . . . | 300 | grammes |
| Nitrate of silver . . . | 20 | " |
| Crystallizable acetic acid . | 24 | " |
| Charcoal . . . . | 5 | " |

"The charcoal renders the paper more sensitive; it discolors the solutions whenever it is used.

"The sheet ought to remain three minutes in this solution; and, to insure the contact of the liquid, we rub the two surfaces with a brush. The paper is then washed several times with distilled water, and finally perfectly dried between blotting paper.

"After these two preparations, the paper may be immediately transferred to the camera. It may be kept without change for more than fifteen days in a dark place. In this respect it presents great advantages over all photographic papers known up to the present time. After the exposition in the camera, it is not necessary to develop the image immediately with gallic acid. We may wait with impunity until evening, and even until the next day, or the third day. Every one will understand how much this new process facilitates operations in travelling. The solution of the gallic acid is composed of

| | | |
|---|---|---|
| Gallic acid . . . . | 1 | gramme |
| Nitrate of silver . . . | 0.5 | " |
| Distilled water . . . | 200 | grammes |

"The proof, as usual, is fixed with the hyposulphite of soda."

[NOTE.—This formula was originally published in *La Lumiere*, translated and republished in the *Photographic Art Journal*, February, 1852, page 95.]

And now, having briefly outlined the waxed paper process of Le Gray and its important place in the early history and development of photography, we come again to the collection of negatives under consideration and their connection with the present time.

The story of these negatives and their identification is an interesting one, and may be briefly told.

Early in 1898, a friend, Mr. John Rösch, of White Plains, N. Y., brought me several of these negatives, which had been given him by a customer, in whose attic they had been *stored away, untouched, for more than thirty years*. In moving, they were unearthed and turned over to my friend, Mr. Rösch, from whom, in December last, I obtained them.

This gentleman told Mr. Rösch that he had, in the early '50's, conducted or been connected with a private school in New York City, in which school Victor Prevost, the maker of these negatives, was a teacher of drawing and painting. The impression left on Mr. Rösch's mind was that Prevost died some time in the late '50's. The gentleman himself died soon after this interview, his widow moved away, and all source of further information in this direction has, for the present, at least, been lost.

On coming into possession of these negatives, I began a systematic search, in the limited time at my disposal,

for more light on the history of the man who had left behind him such remarkable evidences of ability and enthusiasm in the development of an art then in its infancy.

In the *Photographic and Fine Arts Journal* for February, 1854, I found an editorial mention acknowledging the "receipt of some very fine photographic views of scenes on the North River" from Messrs. V. Prevost and C. Duchochois, with very flattering comments upon the fine taste and great ability of the artists, and in a later issue of the same journal of 1854, another item stating that "M. Prevost is about issuing a most remarkable and valuable work, one that will perhaps command more attention than anything that had issued from the press for many years. We shall notice it further, on its appearance."

As many of the negatives in this collection are of New York buildings, including business houses, churches, residences and views about the city, many of them numbered in consecutive order, it may reasonably be surmised that it was the artist's intention to publish them, and this may be the work referred to.

The first item immediately suggested to my mind Mr. P. C. Duchochois, of New York—doubtless known to you all through his contributions to photographic literature—to whom I wrote, asking if perchance he could aid me in my investigations, and was much pleased and equally surprised to receive by return of mail a letter in which he wrote:

"MY DEAR MR. SCANDLIN: You guessed right. Prevost and I were very good friends; I knew him in Paris, and when I came to New York in 1853 we formed a partnership. Our studio was in Broadway, between Houston and Bleeker streets, pretty far up town then, but we did not succeed in making it pay; the time for photographers was not yet come, the beauty of Daguerreotype was reigning supreme.

"Prevost introduced the waxed paper process in this country, and he and I the albumen and collodion processes.

"Not only was he a skilful photographer and a good painter, but he was also a savant, a professor of physics of no ordinary merit.

"I forgot to tell you that some of Prevost's photographs were as large as 18 x 22 inches, made with a 4-inch view lens of Lerebours' which I still have in my possession. Yours amicably,

"(Signed) P. C. DUCHOCHOIS."

This partnership lasted from the latter part of 1853 into the beginning of 1855.

Mr. Duchochois tells me further that Prevost was a pupil of Paul de la Roche, under whom he became proficient as a painter, and also of Le Gray, whose process he has so beautifully demonstrated in the work we have here before us; he also tells me that Prevost came to this country *about* 1850, and remembers that he had at least one child, a son whom he often saw. The New York directories of 1850-51-52-53 locate him as an *artist*; that of 1853-54 as a *photographer*, and those of 1855-56-57 as a *chemist*.

This meagre information was all that for a long time I could obtain, but finally, through the columns of a New York Sunday paper, I was fortunate enough to learn of a gentleman who, in his early boyhood, had been photographed by Prevost.

Through the courtesy of this gentleman, Mr. Robert J. Hoguet, of New York, I finally obtained the address of a son of Victor Prevost himself, who is and has been for a number of years living in New Orleans. From him, in answer to my inquiries, I have received the following letter:

NEW ORLEANS, La., May 16, 1901.

W. I. SCANDLIN, Esq.,
Brooklyn, N. Y.

DEAR SIR: Your favor 3d instant. My father, Victor Prevost, was born in La Rochelle, France, in 1820 died in New York, April, 1881—61 years of age. Buried in Calvary Cemetery, Brooklyn.

He came to New York in 1848, returned to France in 1853, thence back to New York. Was the first photographer established in New York City, with C. D. Fredericks, at 585 Broadway, until 1857.

"Then he taught drawing, painting, and physics at Mme. H. D. Chegaray's Institute for Young Ladies.

"In 1869 he became principal of the Fort Washington French Institute, 171st St. and King's Bridge Road, institute for young men. Remained there till 1878, then taught at Institute at Tivoli-on-Hudson until time of his death.

"He received first prize and diplomas and medals at American Institute Fair in New York (Crystal Palace, Sixth Ave., 40th and 42d Sts.) for excellence of his negatives on waxed paper.

"He possessed a most brilliant, versatile mind, and was a successful teacher.

"Thanking you for your interest in this matter,

"Believe me very truly yours,

"E. E. PREVOST."

This letter forms the last important link in my story of Victor Prevost up to the present time, though many minor incidents of interest are constantly coming to light in the matter, and in order that you may have a more extended knowledge of Prevost's work than could be gotten from the comparatively few negatives and prints exhibited, we will now have the hall darkened and rapidly view a number of slides which I have made from what I consider the most interesting negatives in the collection. They will be shown in chronological order so far as possible, beginning with the one dated 1851, showing a business house at 125 Front St., New York, which is the earliest dated negative in the collection, and also the only New York view with date prior to 1854. This will be followed by a few selected from twenty-four negatives which he made in France on his return in 1853, nearly all of which are signed, dated, and titled, and all of which were of scenes in or near Castle Pierrefonds, the Forest of Compiegne, and the cathedral town of Soissons, made famous by Dumas in his *Twenty Years After*. These in turn will be followed by the important group of views in and about New York City.

Before throwing the first view upon the screen we will look upon a portrait of the artist-photographer himself. This slide was made from a faded print found with the negatives, and has been fully identified by several who knew him as a portrait of Victor Prevost.

The lecturer then showed a portrait of Prevost, which was followed by a view of the old store and warehouse of Reed & Sturgis, at 125 Front St., 1851. A number of views in and about the Castle Pierrefonds, France, 1853, and more than twenty New York views, 1854, fully identified, and including Battery Place from a point near the present aquarium, two views of Columbia College at the foot of Park Place.

The American Hotel, store of W. & J. Sloane, and other buildings on west side of Broadway between Park Place and Murray St.

D. Devlin's store, Broadway and Warren St., showing old iron fence enclosing City Hall Park.

The Old Broadway Theatre and Cooper House.

D. Appleton's publication offices and bookstore in the "Old Library Building," which occupied the site of the present New York Life Insurance Building.

The Daguerrean Galleries of J. G. Gurney, also of Root and of Brady, on Broadway.

The building at 441 Broadway, and also the (then) new store of Ringuet, Le Prince, Marcotte & Co., on Fourth St. and Lafayette Place.

An interior, the identity of which is not fully established, but which is probably Castle Garden or Tripler Hall.

Three views showing Grace Church, one of which includes the marble cutting yard of Michael Flannelly, which occupied the corner of Broadway and 10th St. until 1854.

Herring's Safe Factory, West 13th St.

Gori's Marble Cutting and Monumental Works on Broadway near 20th St., on the site of which Lord & Taylor's store now stands.

All Souls' Church, Fourth Ave and 20th St., showing foundation only for the spire finished, but otherwise as now.

St. Stephen's R. C. Church, West 28th St., unfinished.

The engine that ran the machinery of the Crystal Palace, 1853-54.

Church of the Incarnation, N. W. corner Madison Ave. and 28th St. (Since demolished.)

Old Dutch Church, S. W. corner 21st St. and Fifth Ave., with view across Madison Square, including unfinished house and private stables of the Iselin family, and several views of West Point scenery, quaint old residences, an historic old church, and views of iron mills and scenery in the smelting district in and about Boonton, N. J.

Several of these latter, Mr. Scandlin said, are as yet unidentified, but are being located from time to time as the views are brought to the attention of the public.

The slides from which these pictures were thrown upon the screen were all made by the lecturer from the original negatives, and are absolutely direct photo-

graphic copies, without any retouching or manipulation, and form a wonderfully interesting and valuable exposition of the perfection of the negatives themselves. The absence of solarization and freedom from all traces of the grain of the paper are especially noticeable.

In connection with the letter read from the descendant of Prevost, Mr. Scandlin departed from his printed paper to say:

Mr. Scandlin: In connection with this letter I would say that three weeks ago yesterday I visited Calvary Cemetery, and found the grave of Victor Prevost. I found it unmarked, save by the flowers and weeds that nature had planted there, and I would suggest that it is in a capital situation to be adorned by a monument, or a modest stone, if, with the permission of the family, the Photographers' Association should see fit to take such action. It seems to me that we could do no less than this.

[It is to be regretted that space will not permit nor was there opportunity to take in the darkened room notes of Mr. Scandlin's very entertaining talk as the exhibit of lantern slides from the old negatives was made and thrown on the wall by Mr. Bardwell. Many of these were views of old landmarks in New York City, which, in a number of cases, are now replaced by more modern structures, and possess a local flavor and interest that to residents of New York City is most interesting; while to the photographer they have great value, since they illustrate an early phase of the art, and exemplify what an artist could do with the camera even in that early period of its development. One of the first pictures shown was a store front, and there happened to be a man in the foreground, evidently the proprietor. This gave occasion to Mr. Scandlin to remark that the desire to "be in the picture" was strong even at that early time, which was highly appreciated by the audience. Mr. Rockwood called especial attention to the straight lines in the negatives. The collection, taken all in all, was a great treat, and the explanation of the views most charmingly delivered by Mr. Scandlin.]

President Core: It has been said of the American people that they have not much veneration for the past, and are rather disposed to tear down than to preserve old landmarks; but the close attention with which you have followed Mr. Scandlin's lecture, and watched the pictures as they have been thrown on the wall, would indicate that photographers at least have great reverence for the things of the old times. While we are recalling past history of our art I think it would not be out of place to go a little further back, a little deeper into things that gave us inspiration and prepared the way for the progress that we are showing here to-day. We have with us a gentleman whose name only needs to be mentioned to make you feel that you will be well entertained. He will tell you about the Old Masters, the fathers of that which is artistic not in photography alone, but in every other beautiful art—Mr. Pirie MacDonald [Applause.]

Mr. MacDonald: I have often been told that I could clean out a hall with very little effort, and I know there is a willingness on your part to stay, and I appreciate the applause all the more because I know if I get it now it will be more than I will do after I finish. I have been asked by Mr. Core to speak on the subject of the "Old Masters," but it seems to me as though he had picked out the wrong man.

## Mr. MacDonald's Address.

### *Character Studies of a Few of My Friends Among the Old Masters.*

That I should talk on a subject of this kind may seem almost impertinent; but from my earliest childhood words have always conveyed to me a sense of the solid.

Words were never empty, and always created in my mind definite pictures.

Away down in Maine is a grand old house on the outskirts of a quiet, restful village, with an old-fashioned garden, poppies and portulaca, sweet williams and holly-hocks.

A side door, with a trellis leading from it down the garden walk to the little summer house. I read a story once of a sweet old lady, and I placed her in that house. Only last summer I went by and looked over the hedge, expecting to see her dear old face smile out at me as she would lift her head from her embroidery frame in the little vine-covered summer house. Then I remembered the story had said that she had gone home. And as I walked away and turned into the village street a quiet sadness filled my heart, and I felt that I had lost a very dear one.

I had really known and loved her. And in the same way some of these old painters have been so close that I might almost have touched them.

I have seen them many a time, and I will tell you simply some of the things I have seen and some of the words they have told me—some memories. So you see it is not so presumptuous, for it is what I have seen and heard.

Raphael was born—not like Michael Angelo of parents who were without even the artistic instinct. He did not come into the world as did Benjamin Constant—from a race of gypsy peasantry in whom no trace of taste or culture is discoverable; nor, as with the great Titian, who was apprenticed to a mosaic worker, by sheerest accident. Titian might as easily have been apprenticed to a tinsmith or a tailor.

But this Raphael was the outcome of generations of culture and training. His father was an accomplished

and a more or less famous artist. And the youngster was imbued with the constructive sense, the graphic sense, and the sense of harmony almost before his birth.

His teachers found ground that was fertile in one of those minds which seeks information and invites training and instruction, that it may express itself.

In one of those peculiarly assembled brains that had the accumulated culture of his ancestry and the addition of the inventive faculty almost without parallel.

His master found a hand that obeyed the mind almost at once in a manner and with a style that his fathers had spent years of toil to acquire.

The rapidity with which this wonderful mind bore fruit will be recognized in his picture—which is now in the Vatican—of the Coronation of the Virgin. The magnificent sweep of lines and its dramatic vivacity leave it, after 400 years, one of the wonders of the world. *And conceived and painted by a boy of nineteen.* Even at that age he was unlike his predecessors who treated the idea only—and by symbols, they might almost be called—mere figures and forms which were accepted to have certain meanings—sets of lines which tradition *said* were beautiful.

Raphael recognized the most perfect human beauty as the means of presenting the divine, believing that, as man had been made in God's image, God's image was good enough to use as his model.

In his famous "Madonna della Granduca" you find the Holy Mother, no less a virgin saint than in the older pictures, with a soul full of divine purity and gentleness and kindness. But the soul shines out from a face that we might believe to be human, with delightful coloring and all the warmth of life, clasping the Child to her bosom, loving as only a mother can love, the purest and holiest of human feelings, full of womanly charm and divine majesty and an air of piety that cannot be passed without the feeling of profoundest reverence, and is absolutely unforgetable.

In his picture of the child Jesus there is always the freshness and genuineness that are so characteristic of childhood, but with the "breath of the Godhead upon him."

Raphael's fancy seemed utterly inexhaustible, and he always clothed it in delightful forms. He is called "Raphael of the Hundred Madonnas," and that falls much short of his actual work.

Ever varying and ever beautiful, we find the Solly Madonna; the Colona Madonna; the Terra Nuova Madonna; the Madonna of the House of Orleans; the Madonna della Granduca; the Madonna of the Meadow; the Madonna with the Goldfinch; the Madonna La Belle Jardiniere; the Madonna of the Palm Tree; the Madonna with the Diadem (in the Louvre); the Madonna with the Candelabra; the Madonna of the House of Alba; the Esterhazy Madonna, and many others, until we come to the Madonna della Sedia, which is in the Pitti Palace at Florence, and has probably been reproduced more times than any picture, sacred or profane, that was ever painted.

And then we find the Sistine Madonna of the Dresden gallery, the like of which, for purity and loveliness and majesty, the world has never known—an embodiment of all those qualities that would go to make up the "perfect mother of the Son of God."

Raphael was called to the Vatican and assigned the task of decorating the Stanza della Segnatura—so called because the principal arts were issued therefrom—and was at that time considered the most important section of the institution.

It was on these walls that he painted "The Disputa" and "The School of Athens," representing divine and profane philosophy, and so well that to this day the room is famous as the holy of holies of the art of painting.

Vasari says: "How liberal heaven sometimes shows itself in bestowing on a single person the infinite store of its treasures and rarest gifts. . . . Raphael was nature's gift to the world."

Simeone Buonarroti would have served as an illustration in one of those cases where from "shirt sleeves to shirt sleeves is four generations." But he had prolonged the agony by being too lazy to put on the work apron and wooden shoes and be honest. He was one of those degenerate tail-enders who was born with a silver spoon in his mouth The spoon was very much worn and pretty thin by the time it reached him. He used the spoon as much as he could without inconvenience to himself, and when it got to his children there was nothing left but a bit of the handle. He had figured it all out, however. What was left of the spoon would serve to scratch the back of someone who could land his son in an office under the State or a post in the army. Simeone didn't care much which it was, so long as he did not have to work and there was a little "rake off." In either case the job would be easy—only a matter of an occasional bit of dirty work for one's patron. You know it would never do for a Buonarroti to really work.

But Michael did not care a whoop about offices under the State nor posts in the army. When his Grand Dukelets went by all dressed up in high-priced clothes and a sword, Michael did not take off his hat and pull his forelock as his father did. Not he. He would hide behind his mother and make faces at them.

Michael was never what would be known as a pretty boy, and the making of faces did not enhance his beauty.

When the grand folks were gone his father would hit him a clip and warn him never to let the wind change when his face was mixed up that way, for it might get stuck and never get straight again.

Then, again, Michael was busy. Out in the back street there was a gutter that had the loveliest lot of mud, of all degrees of consistency, from hard chunks almost like flint down to the softest, sunshiniest variety imaginable. Michael from this used to make all manner of curious things—things that he had seen, things that he had not seen, and things that just grew that way. This to the disgust and horror of his good mother and the utter indifference of his father.

All this happened at a time when they were doing a lot of building and fixing up and decorating of churches throughout Italy, and work of that kind had a fascination for Michael. The size of the rooms, the beautiful colors, and I guess the very air of sanctity that pervades Roman churches had an effect on him.

A quiet, moody little brat he was. Never in the way, he took good care of that, for he would have been sent home with a cuff. Well, they had other children at home, and when he was away he was not bothering them any way. And he was too little to hurt anybody else very much.

So he got into the habit of hanging around the door of the cottage of a chap named Ghirlandajo, just as youngsters in our time hang around the flap of a circus tent.

And he was tickled almost to death when they let him go after a pail of water, for he could carry it inside, and once inside he did not break his arm trying to get outside again. Then they would let him hold a brush once in a while or wash out a paint can. After a while he went as regularly as the students and workmen, and I fancy that he did not go home for lunch—if they would give him a bit of their bread and onions. Even though they did not give him anything to eat he could not spare the time to go home, he might miss something. And anyway he was positively necessary to the institution, he thought; and, in fact, he grew to be a part of it.

One time, after he had been particularly docile for a number of days—he was a headstrong, impetuous little colt—the master set him down beside the students with a bit of paper and charcoal. He was awkward at first and balky, and didn't like people to watch him. But, good Lord, how that youngster did learn to draw! And how the rest of the boys did hate to have his stuff pointed to as the best example of the day! They were pay pupils, and he was only—well, I guess they thought he was just a good deal what we think a "yellow dawg" is. Anyway, Ghirlandajo, who, by the way, was shrewd just a little, went around one night and had a talk with Simeone, the father; and, of course, there was "nothing doing." Simeone was the sediment—the bad taste in his mouth—after a line of cheap gentry, and it was an insult with a big "I" to suggest that his boy learn a trade. He would not mind your buying him four or five drinks hand-running, and never think of ordering one on himself. Or he would accept the loan of anything, from a pesta to a ducat, without any thought of paying it back. But work! Why, painters were just painters, whether they did whitewashing or frescoes. Well, he guessed not, and was surprised and grieved at having been asked. But the master wanted the boy; he wanted to inaugurate him into a shining example. And the father was appeased, and let the insult go by unavenged.

The terms were that, instead of the father paying the master, the master paid the father. And Michael was bound out for three years. After a while the boy struck his gait and forged ahead, so that he was the master's third hand. And they worked together without regard to pupils and classes and bonds of indenture.

In those days the advanced pupils or apprentices performed the major part of the actual painting, the mas-

ter merely furnishing the design and the color scheme. Michael got beyond the stage of carrying out designs. He worked with the master, creating and designing, and made it possible for Ghirlandajo to do double the work and to double the profit by the same token. And Michael was without salary, for he was an apprentice.

That man Ghirlandajo is, to my mind, one of the bright spots in the history of painting. He had the sense of honor, and he had a heart. He had the capacity and breadth which allowed him to put his own interests in the background for what he considered just and right. He is to me the type of generosity.

After Buonarroti had been with him a year he realized that the boy had genius beyond his power to handle and beyond his means to cultivate to its fulness.

Instead of working a good thing to its limit, instead of grinding out every penny, instead of letting him work out his term, he took him to Florence, to the academy that was fostered and supported by Lorenzo di Medicis, "Lorenzo the Magnificent," and prayed that he be admitted and given the advantages of the school that was at the pinnacle of the art of the time.

Michael Buonarroti was one of those unfortunates who seem to be marked by some fate for opposition. He never wanted to do anything but that some formidable obstruction was interposed and had to be beaten down or circumvented.

It was struggle all through his life—eternal and everlasting struggle. And it had the effect of embittering him. It made him in his after-life a determined, morose, and most unpleasant character, practically eventually separating him from the rest of mankind and its pleasures. But it did, however, much toward creating the firmness and concentration and oneness of thought that made him the mighty man. It forced him to get his pleasure in study and meditation, in labor and in conquering.

After he had been at the Academy a while and had demonstrated that he was the right man in the right place, his father came up to Florence to see him. And came upon him in one of the workshops, wearing a blouse and apron, hacking away at a piece of marble.

So! This was the game! They had gotten his poor boy away from him, to make a stone-cutter out of him. And a Buonarroti work like that! (and so cheap, too). It was a conspiracy to rob him! He would go to the courts! Unless—he got an office under the government (and a sinecure at that). Well, he got the office, for Lorenzo wanted Michael.

Michael continued growing, and was taken into the household of the prince. And the jealousy began to chase him, until one day, incensed at a favor that had been shown him, a fellow student, Forregiano, smashed him in the face with a mallet, broke his nose and wiped out every suggestion of good looks the fellow ever had. Except his blue eyes—and they were to shine with hope yet for a while.

'Twas about this time that he made the Cupid—the Cupid that got lost—the piece that was enough to make life-long reputation for any man, and then Lorenzo died.

Then came the son of Lorenzo—Piero di Medicis—who continued the academy. Not because he wanted to be a benefactor, but so that people would think that he was one.

Snow does not often fall at Florence, but one day it did, and Piero celebrated the event—with some friends—and just to show a stunt, he commanded Buonarroti to make for him a snow man. He did—a satyr—surmounted by the monkey face of Piero di Medici. The guests laughed, and threw him a shower of silver. But he turned on his heel and stalked away, and the silver lay in the snow for the next man to pick up. The bitterness was commencing to take hold.

Piero di Medicis was heartless and extravagant. He ground the people down, as did Louis XIV., and they turned on him as the French did on Louis XVI. Only they were more merciful, they just kicked him out. Of course Michael, as part of the household, got his walking papers, too, and was pretty lucky to be merely exiled.

Well, he went to Bologna, to look for a job. He went to a sculptor, and when he was asked what he could do, he took a charcoal and drew on the wall a hand—a human hand—such grace! such purity of line! and of thought, and such absolute mastery!

The old man rushed at him, clasped him to his heart, threw open his studio, and said: "All this is for you! "We will share it; we will work together," and they did. And they were the happiest years of Buonarroti's life.

Then it was that he made the angel for the Shrine of St. Dominic. They said that an angel hand must have sculptured it. And in the fondness of their appreciation they called him Michael *Angelo*.

Then to Rome, where he made the purest and most sympathetic of all his works—the group of the sacred Virgin Mother and the dead Christ—called "Pity." It is told that when the piece was finished he mingled with the admiring crowd that surrounded it, and overheard two learned doctors discussing the authorship of it. That night he stole into the chapel and by the light of a lantern carved his name into the cincture of her garment. And then the bitterness and pride seized him again, and he never signed another work; saying: "That if they were not good enough to be distinguished without his signature, they were not worthy of it."

Pope Julius II. commissioned Michael Angelo to make him a tomb that would be one of the monuments of the world; that on account of its artistic worth would be preserved to the end of time.

At last Michael Angelo had the opportunity of his life and his ambition was to be satisfied. His design was made with a full heart; loved in every detail, dwelt upon with prayer and labor almost measureless. And it was accepted by the Pope.

Michael Angelo spent a year at the quarries of Carrara, mining the stone, that it should be fit for its purpose. A tomb for the Pope and a monument to Michael Angelo and his art—his all.

One day the Pope got into an impecunious mood and sent word that he wanted an accounting—the time—the money—where was it gone? Where was the tomb? Where were the statues? Michael Angelo sent word that for the time and the money they were in the quarries of Carrara, and the statues were there too, and that there were many others there—they had better send some one to take them out. As for him, his address was Florence.

Truth is, that some one had whispered to Julius that it was unlucky to have one's sepulchre built while one was alive—and Michael Angelo knew all about his enemies at court. But the dream of his life was smashed—like a glass.

After a lot of pulling and hauling—commands—cajolery—promises—and threats, Michael Angelo returned to Rome. He was commissioned to decorate the ceiling of the Sistine chapel. Had it been sculpture his heart would have overflowed with joy. But painting! Painting was not what his soul yearned for. His love was the solid. So, with his cup of sorrow and disappointment and bitterness filled to overflowing, he went to work. *Hopeless;* shut out from the world on a scaffold, where he worked, ate and slept, drawing his food up with a string, to be alone; for four years he labored.

When the ceiling was finally uncovered, it was like a thunderclap, terrible in its intensity. The soul of the man was in the work. Taine says that it is as though Michael Angelo were listening—beforehand—to the thunders of the last day.

This is my picture of Michael Angelo. Tormented by an avaricious family; eternally and everlastingly disappointed, and thwarted by the caprice, superstition and ignorance of his patrons; chaste in a voluptuous court; harrowed in his soul by the degeneracy that surrounded him, lonely and ill at ease in the society of petty natures; outwardly reserved, and of deep emotions; sensitive to excess; an impetuous, resistless spirit; heroic and terrible.

The father of Rubens was a lawyer, and in the game of politics he played long and well, with a well directed and masterly hand. But he made one bad move and died in exile. While he was under the ban Peter Paul was born. It is said that he came into the world a welcome child, carrying the beauty of the morning in his face, form and spirit. He was bright, cheerful and obliging. Handsome as his father. Big, dark brown eyes and clustering curls. After the father's death they went back to Antwerp, and the mother being a good Catholic and diplomat, their confiscated property was restored to them.

A certain countess wanted the boy for a page, on account of his manner and his beauty. And the mother, foreseeing the advantages of a court training and its influence, submitted to being parted from her charming twelve-year old boy. The countess lavished on him affection as only a childless woman can. He was reared as though he were a prince in his own right—tutors and polite society were his daily company. He was at once the favorite of all. And the countess loved him so much that she taught him to call her "mother." This was more than his sure-enough mother could stand, so she took him back home. But not until he had acquired

the air that goes with noble breeding and in those folk who have no occasion to be other than gentle.

The mother had heard of Raphael and Michael Angelo and Leonardo. How they had through their works become peers of princes and popes. And to have him occupy such position was her ambition for her boy. That he had latent talent events have proved. But the boy entered into the project to please his mother. Not because, like Rembrandt, he was good for nothing else, Nor like Michael Angelo, because he just would. Nor like Raphael, because it was born in him. But because it was his way—to please—his way to try to make other folks happy, and his mother of all others.

One of his teachers was a landscape painter who could not paint faces, but he had a friend who could. When he wanted a figure introduced into a landscape he would send for his friend, the portrait painter, and when Mr. Portrait wanted some scenery in a portrait picture he would send for Mr. Landscape painter. And so they lived many years, and happily.

By the time Peter Paul was about fifteen or so he had learned the game of both of these men. And fired with the ambition to make good the losses his mother had sustained by his father's failure in life, he sought further progress—which was in the direction of portrait painting, because he knew that it was only by this road that he could get the influence of the Church behind him. So he worked long and hard until at about the age of twenty, when (counselled by the wise mother and his own unerring diplomacy) he entered the studio of a man who took very few pupils, and only those who were capable of seconding his hand and carrying out his designs. A man who was no better painter than his former masters—perhaps not as good—but he was the court painter. Rubens was like his father, in love with the game of politics. But, unlike his father, he never lost a trick. This man, Van Veen, the court painter, was to supplement the acquaintances of the gentle friends of his youth, was calculated to open for him the doors of royalty itself.

The plan worked to perfection, for at the age of twenty-two he was nominated as a free master of the Guild of St. Luke—by Van Veen—and he was introduced by him to his master and mistress, the Archduke Albert and Isabella his wife, who was the daughter of Philip II., King of Spain.

Now that his place in the social world was secure, Rubens wanted to study at the fountain of art—Italy.

To the ordinary painter-man there would have been more or less difficulty about getting passports; examinations would have been necessary to prove that he was capable of representing the country with honor.

But this young gentleman had paved his way, and a personal introduction from Albert and Isabella to the Duke of Mantua, the artistic successor of Lorenzo the Magnificent and a world-power of his day, was part of the baggage of Rubens when he left Flanders. And he carried in his head a supplement to the letter in the form of a tip from Van Veen. But in order to last with the Duke it was necessary to win the Duke's minister of State—one Chieppo.

Like all good politicians, Rubens was very wary when he went up against Mr. Chieppo. But history proves that Mr. Chieppo was pie for Rubens. Mr. Chieppo was main guy of the establishment of Mantua. He figured the policy for the State, levied the taxes and collected them, and then devised ways and means for spending them so that they would go farther and show most. He bought the Duke's underwear and bossed the servants: he wrote the Duke's letters and received the Duke's visitors—at any rate that part of them the Duke did not want to see—and he had a head, long like a horse. And he knew a good thing when he saw it.

And Rubens carefully studied the part of the "good thing" (and Mr. Chieppo). The Duke was captivated by the magnificence of his manner, and his simple, subtle, elaborate and frank egotism on the subject of his own work.

The Duke was proud of his new ward, and exhibited him to his friends with the explanation that he made him himself. Which Rubens stood for; it was in the "good thing" part.

The art collection of the Duke of Mantua was composed of the best that up to that time the world had afforded. Works of del Sarto, Tintoretto, Leonardo, da Vinci, Correggio, Veronese and Raphael.

When an honored guest praised some particular piece, it was the custom for the Duke to note the fact on an ivory tablet, and say with good-natured nonchalance, "I will have my best artist make a copy of it for you. Don't mention it."

Rubens went to work copying the pictures, just what he had gone to Italy to do. And whether Rubens or the duke was the luckier—well—they both had private opinions. But it was part of Rubens' prearranged schedule. The ladies of the court used to come around afternoons to see him paint, and he used to fill their ears with carefully warmed words.

Mr. Chieppo "got on," and gave Rubens this advice: "You must admire all these ladies in equal portion; should you show favoritism the rest will turn on you, and to marry one would be fatal to your art" Rubens made a note of it, and sent it to his mother, who O.K.'d it and sent it back by special delivery.

After a period of unflinching industry Rubens was sent to Rome to Cardinal Montalto, nephew to Pope Sixtus, and barring the Pope, the strongest man in Rome.

With a letter from the duke, which said: "You will be graciously so good as to allow our Fleming to make copies for us of such paintings as he may think worthy."

The world of art was now open, and he wrote his mother, "If I don't succeed it will be my own fault."

Mr. Chieppo sent orders to the Envoy of Rome to see that Rubens was well treated. Also to report as to how he spent his time and how he got on with the cardinal. Mr. Chieppo had no cause for complaint, however, for Rubens was working in the line and at the place that his plan had mapped out, and was being paid for it; and to keep in the good graces of the cardinal, that was his part.

As a matter of fact, the duke had come by this time to regard himself as having a proprietary interest in Rubens, and until Rubens had gotten all he was looking for he never hinted to the contrary. But the time did come when he wanted to go back to Flanders. And right at this point he had to bend. The duke had a scheme and Rubens resolved to get the best out of what could not be helped. So with a great show of interest he jumped in the band-wagon by "joyously" consenting.

And royal flushes and four of a kind of aces, nothing less, were the kinds of hands that Rubens held in the Court of the Duke of Mantua.

The duke had some little axes to grind, some favors to ask in the near future, and some information to be ferreted out as to the attitude of the Court of Spain. Flanders was a Spanish possession. Rubens was from Flanders, and the daughter of the king of Spain was one of Rubens' patrons. In fact, he was sailing under her colors.

When you appear to take for granted that a man is artistic—when he is not dead sure of it himself—you are apt to win him in a walk. Spain was more horsey than artistic just at that time (though it was growing; Velasquez and Murillo were soon to appear). But the play as figured (and it proved to be the right one) was that the duke would send some pictures—copies of Titians, Tintorettos and Leonardos—to the king. And to invest the occasion with the proper dignity he would send his best painter with them (to see that they were properly unpacked and rightly hung). And Rubens was the precise combination for ambassador, so decided Mr. Chieppo, the gentleman with the long head, like a horse.

Of course Mr. Chieppo and Rubens had seances as to what should be done—and just how; whom the strong plays were to be made to. The Duke of Lerma was the man behind the throne, and he *had* to be won. The story goes that the Duke of Lerma had a bad eye. Rubens painted a portrait of him, emphasizing his good points, and he forgot to paint in the squint.

He made a portrait of the King in which he looked like all the handsome kings in the deck, though they say he wasn't much of a king anyway. But Rubens was in the "hit" business. He was an artist, a horseman, a musician, a politician and a gourmet. He had a fine appreciation of things eatable and drinkable. Sure, he had gout when he was thirty. But Rubens was in the "hit" business. He was initiated into the inner life of the Spanish Court as Iberta the Mantuan Envoy had never been, and the Spaniards liked him so well that they asked permission to keep him a year.

(It is said that he spent the latter part of each evening writing to Mr. Chieppo on those topics on which Mr. C. wanted to be informed.)

At any rate the result of the mission was such that the Duke of Mantua said: "Jewel of my heart, name your desire, and you shall have it."

He had been eight years in the service of the duke, and he wanted home—Antwerp, mother, and the good old Flemish tongue. He had the duke where his hair was short and he went home. When he got home he

was made court painter. He opened a school, and pupils flocked from all Europe. He had commissions for more pictures than he could paint. And still he painted well and earnestly. Hamerton says: "We have more canvases from his hand than from the hand of any other master." And these pictures are a quarry, to which, consciously or unconsciously, every artist of to-day is indebted.

Rich, courtly, handsome, the balance of his life-journey was one great triumphant success.

Without sympathy on your part you cannot get the other person to reveal to you what they have that is good and noble.

If you are coarse and brutal—in order to protect themselves, other people must show you what is coarser in their character.

Sympathy, like nature, finds its level. As you love so you will be loved. As you hate so you will be hated. What you give in kind it will be returned to you.

The story goes that one day while Rubens was out of the studio a scuffle occurred in which a freshly painted picture was knocked off the easel, and one of the students sat down on it, obliterating the face. Of course, there was the devil to pay. A little blond-haired, blue-eyed chap set to work desperately to repair the damage, if possible, while the likeness was still bright in his memory. When Rubens came back he lined the rascals up and put them through a course of sprouts to discern the culprit. The little blond confessed to the attempt at repairing, and Rubens dismissed the matter with a laugh, saying that he did not know but what it was better done than he could have done it himself.

Vandyck had been so thoroughly in sympathy with the master that he painted as though it were with Rubens' own hand. When he went to Venice he painted after the style of Titian so thoroughly that the Titian touch can be recognized through his later work to this very day.

Vandyck was the son of wealthy and refined parents, and by his life with Rubens, the courtier, he was so imbued with ideas of taste and elegance that when he went to Rome he could not associate with the Flemish students, who affected coarseness and vulgarity (as young men sometimes do), and they called him the "Cavalier painter."

While this quality may have weakened his historical and religious pictures, it was the one quality which, when he adopted portrait painting as his life-work, gave to his pictures the air of gentility which separates them, not only from his contemporaries, but places him ahead of any portraitist that ever lived. His likes, loves and sympathies were all in the line of nobility and graciousness and elegance. He painted just what he saw. He saw just what was reflected from himself. By his presentation to others of genuine good nature, affability and elegant bearing, he drew the same from others. And he painted what he saw.

Normal man when in the company of others is constantly as before a mirror. He reflects back the mood and mental mien of his associates. When he painted the English King Charles he painted him as a gentleman.

It is said that the courtly manner and refinement of Vandyck made him a favorite with the King. He was as kingly as the King. He was the only one who painted Charles with the bearing of a prince. Charles had many things, petty and mean, in his makeup. But Vandyck, the princely, drew only princely conduct, and received only princely courtesies from his royal master, who dare not show himself less gentle than his painter-friend. The King showed only those qualities which corresponded to Vandyck's. And Vandyck painted what he saw.

In the Metropolitan Museum in New York is a portrait of James Stuart, Duke of Lenox, the fourth James of Scotland, and the first of England—one of the most miserable cowards that God ever put on the footstool, selfish, weak. A man who allowed Elizabeth of England to put his own mother to death, even when he had France at his back. So small that he had not even mother love. And yet Vandyck paints him as a prince. Vandyck's nature forced from James Stuart those qualities that were good, that had come from his father's line, and the gentler qualities that France had taught his mother. He could not be small in the presence of a man like that. And I warrant you that Vandyck made him (if for the only time in his life) *feel* the prince.

And Vandyck painted what he saw. How can you portray a mighty man mightily if you have nothing mighty to call to the surface the mightiness of the man? How can you portray the graciousness of a gracious woman if you have no graciousness in you which she can reflect back? How can you portray sweetness in a child if you do not love.

You must so live that the nobility and graciousness of every man greets you as your due if you would be a portraitist.

President Core: I would suggest that a rising vote of thanks will be in order to Mr. MacDonald for his very able effort to entertain us this morning.

On motion, a rising vote was given; after which the convention adjourned at about 1.30 P.M., until Wednesday, at 10.00 A.M.

SECOND DAY—MORNING SESSION.

The convention met pursuant to adjournment, President E. B. Core in the chair. When President Core called the convention to order there were seated with him upon the platform ex-Presidents Guerin, Cramer, Decker, and Potter. The President announced as the first business in order the reading of communications.

Secretary Nussbaumer read the following:

MILWAUKEE, WIS., August 6, 1901.

E. B. CORE,
President Photographers' Association,
Russell House, Detroit.

My best wishes for the success of the educational convention. Regret my inability to be with you.

S. L. STEIN.

ST. LOUIS MO., August 6, 1901.

E. B. CORE,
President Photographers' Convention,
Light Guard Armory, Detroit, Mich.

The Detroit Convention, so sound at the Core, will be glorified in history forevermore.

STRAUSS, STEFFINS.

President Core: I would state that I have a personal communication from Mr. Benjamin J. Falk, of New York City, advising that it is impossible for him to be with us, and requesting me to give all the boys his best wishes. While on the subject of communications I have here a letter which is very important, upon the subject of the Louisiana Purchase Exposition. President Core then read the following:

LOUISIANA PURCHASE EXPOSITION COMPANY,
Office of the President.
ST. LOUIS, MO., July 25, 1901.

DEAR SIR: I have read with interest both of your letters, and also the letter of Mr. Edward L. Wilson, of WILSON'S PHOTOGRAPHIC MAGAZINE. It seems to me that the proposition to set apart a separate pavilion for photography will be justified by the great advancement made in the art and by the widespread popular interest which attaches The matter is one to be considered officially by the Executive Commit-

tee or Committee on Grounds and Buildings, to which your letters and Mr. Wilson's letter have been referred. Both the Chairman and the Vice-Chairman of that committee are out of the city just at present, and it is not possible to get definite action upon your proposition until they return.

I think you will be entirely justified in saying to the Photographers' Association of America at the Detroit meeting that the directors of the Louisiana Purchase Exposition recognize the importance of the photographic display, and will endeavor to meet the wishes of the Association as far as may be practicable.

I sincerely hope the Photographers' Association of America will be induced to hold the convention of 1903 in St. Louis.

Respectfully yours,

D. R. FRANCIS,
President.

MR. J. C. STRAUSS,
St. Louis, Mo.,
Secretary-Treasurer.

President Core: It seems to me that this is indicative of a great advance in our profession, and that it is such an important matter that we should take very strong cognizance of it. A separate building, set aside exclusively for photographic purposes, has never been a feature of any exposition since the Centennial at Philadelphia, in 1876, so far as I know. We have always been off in some little corner in the Liberal Arts Building, where we were overlooked by thousands of people who pass by without hardly paying any attention to the exhibit or even knowing that it was there. I think that the matter broached in this correspondence is of such importance that it deserves very strong recognition at our hands, and the Chair will entertain a motion to appoint a committee to attend to this matter.

*Remarks of Mr. Frank Hammer, of St. Louis.*

Mr. Hammer: As a public official of the city of St. Louis, but not by virtue of any authority either from the city or from the Louisiana Purchase Exposition, I have taken it upon myself to appear before you this morning in furtherance of the object explained in the letter. I know that our worthy Mayor of St. Louis and the people that have this great undertaking in hand and at heart will sanction my action, however humble, in extending to you, Mr. Chairman, and ladies and gentlemen, a most cordial and hearty welcome to visit St. Louis in 1903, at our Grand Exposition in commemoration of the Louisiana Purchase, which purchase included that vast domain extending from the Mississippi River on the east to the Pacific Ocean on the west, the Gulf of Mexico on the south to the Dominion of Canada on the north. This vast tract of land is to-day known as the most fertile spot upon this green earth, and unsurpassed for its mineral resources as well. The city of St. Louis is nearly in the centre of the population of the United States. That act of the immortal Jefferson in his purchase of this vast domain will be celebrated in the city of St. Louis.

Photography, as we all know, has taken such wonderful strides in the last ten or twelve years that we all, I am sure, heartily agree with our Chairman, and also with Mr. Strauss, that our art (photography) should be properly represented at that magnificent World's Fair. I heartily agree with you, Mr. Chairman, and I believe, as an advertising feature, that the building which shall contain this photographic exhibit should be emblematic of a modern camera in its exterior, while the interior would, of course, be properly arranged for the display of the progress of photographic skill. [Applause.] My idea in suggesting that this building be the exact counterpart of a camera would be that in that way it would be a great advertising feature, which would be remembered for long years to come whenever the great World's Fair at St. Louis shall be spoken of or pictured. In every bird's-eye view of this great fair there would appear this camera. I think this idea can be carried out, and I think a committee should be appointed that will secure ample space to erect a building of that kind. Mr. Chairman, the Louisiana Purchase Exposition people are liberal. They believe in art and its advancement, and in everything that is conducive to improvement in our lines, and therefore I am in hearty sympathy with this movement to secure proper representation at the St. Louis World's Fair.

In conclusion, permit me to extend again to this Association a hearty invitation from the city of St. Louis to meet there in 1903.

Mr. Pirie MacDonald: In view of the fact that we have an extended programme this morning, and that we have three or four other items of distinct interest, I believe it would be wise to have this matter referred to a competent committee. I know that it will be possible to be talked to intelligently

for an hour by people who have the good of St. Louis and the good of our craft at heart. I know that there are people in this hall that are so jammed full of this Louisiana Purchase notion that they would be able to entertain us for an hour as some of our lecturers probably would not themselves; but it does not alter the fact that we have business on hand, and I move you, sir, that a committee be appointed to investigate the matter, with power to recommend, and to report at to-morrow morning's session.

The motion was seconded and unanimously adopted. The Chair appointed as a committee the following gentlemen, to wit:

PIRIE MACDONALD, New York City, Chairman;
A. H. GRIFFITH, Detroit, Mich.,
EDWARD RÖSCH, St. Louis, Mo.,
JOHN SCHNEIDER, Columbus, Ohio,
WM. ARMSTRONG, Boston, Mass.,
FRANK HAMMER, St. Louis, Mo.,
W. M. HOLLINGER, New York City.

President Core: I believe it is usual to have an election of officers and to appoint, in anticipation of that, a Nominating Committee, whose business it is to see how "the bees are buzzing." Last year that committee did something, perhaps, they will be censured for this year; I don't know—that remains to be seen later. You never know the length of the snake until he is dead.

The Chair then appointed the following Nominating Committee, viz.:

W. H. POTTER, Indianapolis, Ind., Chairman;
JOHN SCHNEIDER, Columbus, Ohio,
FRANK MOORE, Atlanta, Ga.,
WM. ARMSTRONG, Boston, Mass.,
C. M. HAYES, Detroit, Mich.

Secretary J. George Nussbaumer now submitted the reports of the Treasurer and Secretary, which, without objection, were duly approved, viz.:

*Treasurer's Report.*

| | |
|---|---|
| Cash on hand January 1, 1900 | $1201 43 |
| Received in membership and dues | 2773 00 |
| Space and desks | 1602 50 |
| Refund from G. B. Sperry | 90 |
| | $5577 83 |
| Total cost for 1900 | $5577 83 |
| Paid in vouchers from 173 to 230, inclusive | 2471 05 |
| Balance—cash on hand | $3106 78 |

*Secretary's Report.*

| | |
|---|---|
| Cash on hand January 1, 1900 | $1201 43 |
| Received for desk and space | 1602 50 |
| Received for dues | 34 00 |
| Bills receivable | 107 50 |
| Paid Treasurer | 1636 50 |
| | $4581 93 |

President Core announced that, owing to a misunderstanding in procuring a lantern, it would be impossible for Mr. Hitchcock to deliver his address this morning, and Professors Griffith and Hitchcock had mutually arranged to exchange places on the programme for to-day.

The President further announced the entertainment features for the afternoon and evening, viz.:

A trolley ride through the city, returning from the Water Works Park via boat around Belle Isle. A hearty laugh was occasioned by the request of Mr. Core that all those who desired to take the trolley ride should stand up, when the entire house, which was packed to overflowing, arose *en masse*, whereupon, with his usual readiness, President Core exclaimed: "We will bring out all the street cars in the city."

Announcements were made at this time of the following:

A steamboat excursion, given by the General Aristo Company to the P. A. of A. at 1.30 P. M., Thursday, for a sail to Lake St. Clair, overlooking the Flats, "The Venice of America," and returning to the city at 6 P. M.

A steamboat excursion, given by the General Aristo Company to the P. A. of A. at 8.30 P. M., Thursday, for a moonlight ride, with dances and light refreshments.

Mr. Pirie MacDonald stated that arrangements were under way looking to a special excursion to Buffalo to the Pan-American Exposition by boat, to leave at 10 P. M., Friday, and requested all those desirous of joining the party to give their names to Treasurer Barrows. This announcement caused Mr. F. Dundas Todd to inquire what time was referred to in the various itineraries, it being understood that the city of Detroit uses sun-time.

Mr. Griffith: We are a little swifter here in Detroit than in Chicago, and, indeed, swifter than the railroads.

Mr. F. Dundas Todd: I inquired which time you were running by, and I have not obtained information.

Mr. Griffith: Twenty-five minutes faster than Chicago.

Mr. Todd: That is the only chance that Detroit has had of being ahead of Chicago.

Ex-President Cramer: Mr. President and Members of the Association: Last year, when we had our convention, we had the pleasure of having with us one of the most honored members of our Association and of our craft, one whom we all love to honor. I know that you will all agree with me that I have voiced your sentiments with respect to him when I say that I refer to Mr. J. F. Ryder, of Cleveland, whose excellent lady also accompanied him. Mr. Ryder has now retired from business, and, as I understand, is writing a book about his experience as a photographer. He cannot, unfortunately, be in attendance upon this convention, but I know that if he were to feel that he was remembered by this Association it would give him great pleasure. I myself have attended every convention of the National Association that has been held, except the 1888 convention, when I was prevented by sickness, and was in great pain and suffering at that time. I still remember the pleasure it gave me when I received a telegram from the Association, expressing their regret at my absence and wishing me a speedy recovery. I would suggest that some expression be sent by this convention to Mr. and Mrs. Ryder at this time, and I desire that it be made official.

On motion it was directed that such a telegram be sent by the Secretary.

President Core: When Rembrandt was taken to a teacher who was to give him a little instruction about the future things he was to do, he positively refused to paint or draw, because he said he could not. He was always late for the school session, and one morning, when he came in unusually late, the teacher asked him what he had been doing and why he was so late. He replied that he had been drawing a little. The teacher said, "Is that so? Well, come, why don't you bring your work to school and show us what you have been doing?" Well, the rest of the fellows took it as a joke more than anything else, and said, "Why, yes; bring it up and let us all have a look at it." They expected a good time chaffing him. The next morning he brought in the picture. The teacher took it, looked at it gingerly; then gave it a second look, and gazed intently upon Rembrandt, saying, "Did you do this?" Rembrandt, in some confusion and fear, lest some great blunder was about to be pointed out, said falteringly, "Yes, I did it." His teacher at once turned around to the class and said, "Here is your master!" Mr. Hollinger, please stand up; we would like to hear from you.

### *Address by W. M. Hollinger.*

MR. PRESIDENT, LADIES AND GENTLEMEN: I am glad that Mr. Cramer took the floor just as I was about to be called upon, as it gave me a minute or two to settle down and collect my thoughts and get ready to begin right. However, they were near being unsettled again when Mr. Core began to talk of Rembrandt. I thought we were to have a continuation of Brother MacDonald's speech, in which he told us about the Old Masters. Some time ago Mr. Core spoke to me and asked me if I would take some part in the convention. I consented, but was surprised when I found that I was expected to fill the place on the programme represented by the title, "Talk by a Prominent Photographer," and somebody whispered to me that I was expected to select a topic for this talk. They did not give me a subject. So I thought I would talk to you for a few moments (to keep you in your seats and settled down for Professor Griffith) on a subject that interests me most in my business and that I think will do you more good than anything else, because I love to think about it, love to practice it, and love to tell of it.

Mr. Core and I were sitting at the eating-house together, talking about this very matter, and he said, "I want you to talk about this subject at the convention." He has not said anything to you about it. I did not forget it. I thought, "That's all right; I can do that as well as anything, rather do it than to tell you about photography, because we are all going to be filled with that." But what I have to say, while not upon the technical side, will still enter into our business very closely. My subject, then, is "Being Pleasant." I am learning that; and I want to talk to you of it. I want to talk to you upon a subject on which we can meet on common ground. When we find men that think as we do we like them better. The more we find that we are on common ground with people, the better we get along with them. It is the people with whom we have nothing in common that we find it hard to get along with.

This subject of "being pleasant" is a curious one. Everybody is pleasant sometimes, but we want to learn to be pleasant at all times. I want to first talk to you of the advantages of that, and then next how to do it—as far as I have learned it. I have not learned it all yet, but I am getting along. I have been learning it for some time; and one reason why I enjoy life more than I used to is that I am learning more and more how to "be pleasant." It is quite a trick how to do this, and it touches every customer you come in contact with; it touches everything about us. Everybody who has anything to do with us feels this atmosphere at once, from the little newsboy to the members of our families at home; everybody feels the effect of that one thing, and it is the most essential thing to get into our work.

We are told by Shakespeare that our thinking makes things either good or bad; there is nothing either good or bad, but thinking makes it so. Another wise man who lived hundreds of years before Shakespeare said,

"As a man thinks, so is he." "So is he in his heart!" We have learned much when we learn that nothing outside of ourselves has anything to do with our being pleasant—not a thing! No matter to me how you look; no matter to me how you think, or how you feel, I must be pleasant. We have a little world of our own; we all have our ancestral ideas on our shoulders; we all think that we have to be cross, and get old, and get wrinkles on our face, and look crabbed and surly in order to be dignified. There is nothing in that, nothing whatever. If we want to enjoy our lives, we must find out how to be always bright and pleasant.

I would add to these things that those good men told us of, "As I think in my heart; as my heart is, that is the way I am." That is my idea, and on that principle I work When I look at you I do not measure your surroundings; I just measure you, and how you take your surroundings. We all make that which pertains to us. There is nothing affects us in this world but what we allow it to—not a thing. I make myself; I make my day; and when I want to keep right and be pleasant all to-day, I must begin not to-day, but yesterday, and the morning even before that. I wanted to feel pleasant and lively this morning, but I did not wait until this morning to make that resolve; I began yesterday morning; and to be pleasant to-morrow I will begin to-day; and I tried that—and here I am. [Applause.] I am living just that way, I want to say to you, every day, and I am getting along splendidly at it. I am telling you this for your encouragement, that you may believe that it can be done. I never get mad; never get worried. I do not care how things go. [Applause.] It took me a long while to get where I could say that. Now, that has an influence on my children; it has an influence on my wife. I will tell you, when you get your wife to say you are all right, it will be a great step forward. It took me longer than anything else to learn to get to the place where my wife could say I was "all right." Then it took me still longer to get to the point where my wife's corns did not give me the backache any more. [Applause.] It took me a long time to get there.

Every one of the people that come into my business place (or nearly every one of them) is carrying a tremendous load, and they need to meet some one who is not carrying such a load, or can do it more easily. I cannot help another man to carry a burden if I am overweighted myself. No beggar helps another beggar with his pack; it is not the grumblers that help other people in their troubles. The selfishness of men is at the bottom of the whole matter. And I want to say to you that I am a friend to each one of you; but you do not all know it. A man who just met me upstairs said: "Hollinger, you look better." "No," I said; "you are feeling better." [Laughter.] "You are feeling better, and you look at me, and as you feel I am." Now, I am all right all the time. I am watching all that there is good in you, and I am paying no attention to the unpleasant side.

I used to be a great reformer; belonged to three churches and all the political parties that wanted to reform the State. I tried to down the devil, and generally to reform the world. I have stopped all that now, and am trying to live as one man. I am not living in New York only as a photographer; I am living there to be a man; that is my highest object—nothing else. Another thing: I am getting a living, of course, primarily from photography; but I want to do it in the easiest possible way. I am working always along the line of least resistance, which is nature's way, you know. I am paying less attention to things that are wrong, and looking at the bright side all the time, and taking things as they are. Take things as they come, and you will have pictures that will please all the people.

Another thing I am going to say to you; I am going to show you where I can turn this being pleasant to account. I have a friend sitting down there who worked with me when he was a boy. We used to turn over to him the taking of pictures of the babies, etc.; and he used to get in front of them and try to entertain them; and we would hear him say, "Look at the monkey; look at the monkey." Why, even the baby's mother had to laugh. There was no monkey; only she laughed at the "monkey," that's all. [Laughter.] Everybody saw the "monkey." So, look at the monkey. I think of him often, and I always think, "Look at the monkey!"

That taught me a lesson. He never told the mother to "look pleasant." She thought of the monkey.

That suggests a few points. We do not need to tell people any more to "look pleasant." We must be the thing, and we will bring it out of the people. Our pictures must reflect the right atmosphere, and I do not care how fine otherwise they are, they will not have the soul in them that will give them life. The pictures that you will see in some great gallery may not some of them be technically correct in every line, but now and again, as you look at one, you will find a soul speaking out of it. The man was behind the artist, and it is the man who speaks to you. That is what we have to get from our subjects: the soul that is behind the man; you must draw that out; get that into the picture, and I do not care what the rest of it is.

What we get out of people depends a great deal upon what we put into them. When they come into the presence of a pleasant fellow they will feel they are pleasant too, and they will at once think better of themselves. We need to know a little of everything to be able to put ourselves in touch with the people we come in contact with. We must hold ourselves free to enter into the thoughts and the lives of the people we meet, so that we can draw them out; make them enjoy being in the room with you, and they will go away feeling better. Make a pleasing impression upon every man or woman that comes into your studio. Don't talk to them about their corns, but help them to bear them by paying no attention to them. [Applause.] I am going to stop. [Cries of "Go on!"] If I go on, you know, there is no end to this. [Applause and laughter.] I will just have to stop when the President comes over and sits down in his chair.

Now, that is an advantage to you in many ways, but especially in the daily conduct of your business. Let me give you a little incident which illustrates this. When we went to our meal the other day we were in a fearful hurry, because we were late. I was so hurried that it took me a long time to get my tie fixed and the little details of my toilet. Finally we got into the dining-room. It was full, and we could not get a waiter right away; but the head waiter brought us an old fellow, who moved around apparently in a very methodical and lifeless sort of a way; like that (illustrating), seemingly moping about. We were in a terrible hurry, as I said, and at once my heart went down, but I thought, Well, we will make the best of it and wait, so we waited. The old fellow took our orders, and came in again with a smile, placing everything in its proper place, without fuss, without hurry. He arranged all the necessaries of the table; he put the salt, the pepper, the coffee, everything in its place. Then he said: "Am I all right as far as I've gone?" I saw at once we had struck the right man. If he was asked for anything he didn't fly around after it, like this (illustrating); he simply got it.

We kept on at that table, and I found that that old man knew every time that I was in the room. He knew many of my ways. He knew that I didn't eat a great deal. He anticipated my wants. I tell you before I left him I tipped him a little more than I customarily do, and I was glad they gave me the old man. I was glad I had found out what there was in that old man, with his pleasant smile. I tried to express something of this to him, and he seemed to appreciate it, and when he came again to our table he said, "I see you are around at my table again," and he was just as pleasant and as nice in his quiet way as ever. Now, if I had kept my ruffled side out I would never have enjoyed that old man, nor would he have enjoyed coming to me the next morning and telling me that he was glad to see me at the same table again. See? Now, the point I wish to impress by that is, always to keep the best side out, no matter how things go.

Now, here's the way to do it. Here's my recipe for making everything "all right." Do you hear that word? "All right." I tell you that is a tremendous word, which I feel right to the soles of my feet. You can wake me up in my sleep, and if a burglar would come in I would say "All right." [Applause.] Ask my wife if I wouldn't. All right. Nothing ever comes across me that is not all right. If anybody bids me good-bye I say "All right." They tell a joke on me that one day there was a young girl going away from our town on a bicycle for Columbus. We went down to see her start. She said to me, "Good-bye, Mr. Hollinger; I don't think I will ever get back to Dayton and see you any more." I said, "All right; all right." And it was all right. Everything is all right. If I am all right, everything else will be all right. Now, that is the thing. This does not come by saying it once, but it comes by knowing that all things work together for our good when we want them to and when we are right and enjoy the good there is in everything.

Everything, every person, has good in them. There is not a bad person in this crowd. None of you are any worse

PORTRAIT

By D. Rosser Studio, Pittsburgh, Pa.

than I am; none of you any better. I don't like anyone to say he is any better than I; nor am I any worse than anybody else. Every human being is good in a way. It is your and my business when that person comes into our presence to get that good out of them. When I meet anyone and I keep the sweet part out, it will draw the sweet out of them. Everywhere I go I am getting the beautiful, the lovely, the sweet side of life, and I think that almost all my pictures show that, and if they do not I do not show them to anybody unless they show forth the best there is in the subject. I don't care how cross somebody is, I know the only way I can counteract that is by not feeling cross myself. If things don't go right, that's all right.

I want to say one word more, and then I will quit. You will never get the best out of people until you are willing to trust them. I went to the great city of New York prepared to trust everyone that came into my place. In earlier days I used to tell people when they came up to the desk, "You will have to pay; don't trust anybody; I treat everyone alike" And the next time we met that man and I didn't feel quite so kindly to each other. I learned after a while that I could trust everybody, and things moved along very much better, and I got very much more money out of them. Some of you probably say, "You cannot do that in New York." I think I can, for you know that every person that thinks you have a good opinion of them in your town likes to pass you on the street, and everybody that thinks you have a bad opinion of them doesn't want much to do with you anywhere.

There is not a man or woman or a child that is going to cheat you if they can help it if they think that you are all right. You know that. [Applause.] You may not get your money as quick as you want it, but you will get it. Trust people everywhere, and you will get your pay. Many a mother has lost her child and has no picture of it because she thought she had to pay in advance or she couldn't get a picture taken You might have taken a beautiful picture of that child if you had been willing to trust that mother. Let us do as we like to have others do to us. I do always the things that I would like to have people do to me. I bought some supplies in Cincinnati from a concern that never saw me before. I selected what I wanted, and said, "I think I will take this piece with me." They said, "All right." And they sent the balance to New York, and they never said pay or never said bill. They were the first people I paid after I got back home. I felt I was all right. I have tried to treat every person I have come in contact with the same way. Don't talk much to me about photography. We all know about that; but we want to know how to live. I have kept this room full, and not a man has left his seat, yet I didn't ask anyone of you to stay. You did it. Why? Because you saw, as my friend used to say, "the monkey." [Applause.]

President Core: The gentleman who next appears before you needs no introduction from me. In fact, not anything that anyone could say or which anybody could print would add one jot to his laurels. Mr. Griffith, you will please come forward.

## *Pictures that Live.*

MR. PRESIDENT, LADIES AND GENTLEMEN: I want to tell you what Mr. Hollinger has got; he has got religion. I used to think he was a great photographer up to until an hour ago. Now I think he has missed his calling, and that he ought to have been a Methodist exhorter; they are always telling you they are all right. [A voice, "We need more of them."]

You are right. He is doing just the very thing that I told you people to do three years ago, and I am going to steal some of his thunder. I told you three years ago to "look pleasant," only he says it in a better way than I did. I will bet you two dollars and a half, which is all the money I have got, that he has never been in the presence of a Methodist minister and two or three deacons and hit his finger with a hammer. I have been in that place, and I said "God!"—"bless us all!"—and I just saved myself. [Laughter.] I tell you Mr. Hollinger has the right idea, and you all want to get it. You will remember that I said to you that when you began the day by quarrelling with your wife in the morning, and went away without kissing the baby, you might as well shut up your shop and go away and stay away, because you would not do any business that day. He said he did not want to talk about photography, that you knew all about photography that was necessary. I believe that. I think that by the evidence of your pictures upstairs you do know something about photography. I believe that; and now, then, there is one who knows that he must not trust to his chemicals and plates entirely, but that he must give this part of his human anatomy some little chance to develop that which is in it.

This laboring eternally, this eternal grind for something to eat and wear, is the curse of the American people to-day. You need not do that. Why? The men who get rich are not the men who labor. They are the men who let somebody else do the work, and if you people will put brains and thought and study into the manipulation of your chemicals, your plates, and your paper, and the taking of your pictures, then you will get everything that Mr. Hollinger has told you of. You must be able, however, to get something out of your subjects that was not there before, and that is what will require the greater part of your study and skill. I know Mr. Todd will say that has nothing to do with the question, but, Mr. Todd, you just keep quiet. Everything has something to do with this question. You cannot even pick up a piece of pottery, if you are at all interested in art on any side, but it has its interest and its application to that which you have in hand. I hold before you a piece of glass 3000 years old, of marvellous coloring, painted by the fingers of time, dipped in the palette of eternity; colors that no man has been able ever to get in any other way, although I understand that Tiffany has been working in New York City for years to do that very thing.

I have mentioned this simply because I wanted you to go back with me to a consideration of the "Old Masters." There is nothing new under the sun. Go upstairs and look at the productions of men that have studied those old masters. Literary men have to go back to the classics; sculptors have to go back to Greece and to Athens and to Rome for the best things. The painter does that to-day, and the photographer must also do so, or else he will not accomplish anything. [Applause.] If you are going to take up any subject—let it be a single portrait, a genre picture, or a composition; you must begin at the fountain-head. I saw a portrait a short time ago by a man who paints Indians. He had painted a squaw's head which was much admired. People looked at it and called it wonderful. Some one asked me if the picture had been taken from life? I said "No." "Why," said the inquirer, "he has lived among them." I said, "I do not care if he has, that picture never was painted from life." "Why not?" "Because there is that little stone trinket on her forehead in the form of a bird, which never is worn by an Indian woman except she be married, and this is said to be a picture of an Indian squaw, young and unmarried. He never found such an one wearing that form of ornament." He had evidently seen that pretty little trinket and put it on his beautiful Indian head.

A short time ago we had sent to us a lot of material from Egypt. Now, there isn't anyone that knows much about Egypt; they may imagine they do, but there is a great deal that is not known. Among the lot was a quantity of beads. Those people loved beads, and every form of bead had its symbolic value to them; it was in its own peculiar way connected with the woof and web of their lives. We wanted to place the beads in the form of an Egyptian necklace, and sent to Egypt, to Paris, to Dresden, to Rome, to Berlin, and to London, asking them for designs. One old priest of that far Egyptian country wrote me, "You need no design. Think over it, dream over it, like those old priests in the temple, until at length it appeals to your very heart and soul, and you will make it rightly." And I found that was right. After sending it on to them I found it was right, every bead meant something. They cannot be strung together haphazard. And yet many pictures are put together haphazard. A fellow sees something that is pretty, and he puts it into the picture. The old masters did not do that. And in that faithful adherence to the proper criteria we must follow the usage of the old masters. I have collected, to illustrate this matter, a few pictures at random. I have prepared no notes of my talk; would lose my place if I attempted to use notes.

Here is one of Rembrandt's. Pirie MacDonald—I did not hear him the other day—gave you a charming picture of that man, I am told. That man was full of

excuses; he did not work very hard, but his pictures live simply because he had that thing that Mr. Hollinger has told you about; he could bring out the soul of the subjects he painted. You have read of the sort of a man he was—stiff, stately, full of natural nobility of spirit and demeanor. You have all met such characters. I go into a store, and nobody greets me, nobody pays any attention to me, the chances are that if I want to buy anything such as is kept in that store I will at least never go in there again, simply because I have been met in a cold spirit. Now, I want to be warmly greeted; the man who meets me must meet me half-way, and he is the man I want to see. That is the man that I like to go back to again. Mr. Hollinger has the right spirit; be happy, and the world will be happy with you; mourn, and you will mourn alone. Treat the whole world as a looking-glass; smile at it, and it will smile in return; frown, and you will get a frown in return.

I used to know a young fellow in a store who always was having trouble. Somebody had a better job than he had; somebody had sold more goods than he had; somebody else had gotten the inside track in some way. I said to him one morning, "Charley, this is Monday. Now, for God's sake go out and whip the first newsboy you find, and take his papers away from him, and all his money, and come back and tell us that you have beat somebody at last!" That is the right spirit; you want to go out to meet the world with a joyous disposition, and you will be all right—except, as I said, when you hit your finger with a hammer, and then it will be all wrong for a moment or two! But you can swear in such a way as to protect yourself—as I did!

Murillo! What a wonderful character! You do not wonder that he could paint pictures. He was a man that was in love with his wife, in love with his children, in love with his daughter; and he eternally immortalized them by getting them into every picture he ever did. He was brimful of religious feeling. To show you how minutely he carried his religious fervor into his work, he never in any one of his pictures of the Virgin exposed the foot; the hands he painted, but never the feet; but he would paint a beggar until you would fall in love with the beggar; all his beggars were charming, because he saw in them something beside the beggar. He saw in them something that he admired, something that the world admires with him; for he put it into the picture He painted fifty-two Madonnas in all for churches, all filled with the holy passion of mother-love, some breathing forth a holy reverence in anticipation of being the mother of God; and then, on the other hand, when he painted a beggar he gave to him that human side of character that appealed to the multitude, and which has made his pictures live. He saw in his beggar subjects not simply the man, or the boy who posed for him, but the something that was to come from his brush and canvas.

The other day, in Boston, a man was introduced upon a public platform in these words: "Forty years ago there was a boy returning from school in rags in a certain city of this country; and when he asked to be taken across the river which he had to cross in a ferry, he was told by the ferryman whose facilities were very meagre, that they could not take him on that trip because they were loaded down with passengers who were visitors, and as he had no money he must wait. Much to his chagrin, accordingly he waited. The ferry-boat started across the river, and in the centre of the stream blew up, and not a single soul on board was saved. This boy stood on shore and watched the explosion. By what strange providence was it that that boy was kept off that boat? That boy is to-day Bishop Ireland, of St. Paul." (Applause).

Rubens, a man full of that rich character, had no sympathy with poverty, and could not paint a beggar—never did. If he had done so he would have clothed him with silks and satins, because he himself had lived in that sort of an atmosphere, and was himself a diplomat. Every picture that he ever painted is filled with the color of silks and velvets and a sparkle of precious stones and jewels, and he did not wish to see nor could he sympathize with the beggars about him. He was essentially a sensualist, a man who loved magnificence, the pomp and show of life. And while he was lazy, yet that great dome of his brain constantly inspired him to give expression to those things that were going on in his world, which were reflected by the soul that looks out from behind those eyes of his. It was that powerful mind that forced him to do the things he did He had no sympathy with labor or the laborer; on the other hand, here is a picture by Millet. I am sorry I have not a picture of him. He spent all his days in labor in that little village of Barbizon, making of its women in the fields Madonnas, throwing a halo from the effulgence of his own genius about its toilers, smelling of mother earth, the sweat from whose brows dropped upon the fertile fields. I never want to see the time when I do not have to work. Toil sweetens all the best things of life. But anticipation is often better than realization; so Millet when he had completed his grandest work, his magnificent Angelus, said "If only it wins fame I am satisfied; yet I am dissatisfied with my realization." Still, the French government thought so much of this painting that they gave $115,000 to bring it back from America, where it was owned.

Gainsborough, he who gave to the royal ladies of England that peculiar charm of elegance which you are all copying to-day; and you complain that you have not the advantage of those old-time costumes and hats. Why, walk our streets, and oh! the glorious women and the men that you see! Full of sweet refinement, the dignity and grace of womanhood, the strength of manhood, its ambition, its resolute will! Women who tread like queens, whom you only have to get before your cameras to catch that spirit which their own disposition and temperament reflects. You will not have to put in any of yourself. Do not imagine that you can do that by the adjustment of a tripod behind their heads, or compelling them to assume some unnatural attitude, putting one foot first, which they never do. No use to try and make out of them what they are not, and no need to do so. It is, indeed, impossible to do that. You will never make kid gloves out of mules' ears. It used to be said, you know, that you could not make a whistle out of a sow's tail. That is no longer true, for in 1876, at the Centennial, they had a whistle made of a pig's tail, and you could blow it; but that one fact remains that you cannot make kid gloves out of mules' ears. Catch your people, and you will find they are a magnificent lot. Be careful of your accessories; if you notice, in these paintings the accessories are few, and care is taken that they do not overshadow the main figure.

Here is a picture by Boll, the "Flight into Egypt." See what a deeply reverent spirit is reflected here. No matter what your religion, whether Catholic, Methodist, Presbyterian, or whatever you are, when you stand before this picture it moves you. And I do not believe when you get before St. Peter he will ask you what church you belonged to down here; he will ask you how good you were and what you did here for others. (Applause). When you do good you are opening up new avenues of sunshine, and you will find this a recipe equal to Mr. Hollinger's "All right." It is that which we do for others that counts for our happiness, not what we do for ourselves. Oh! the stingy people that are in the world who think they are accumulating something for themselves. Not so! It is the man who is free, not that he shall take from his family, and impoverish them in order to be generous with the world at large, but he is free with his cheerfulness, his advice, his help, doing every kind act that he can for a brother. There is many a man in this town who pats his swelling chest and says, "Well, I am all right," when if some good friend in whom he had confidence would catch him by the coat-tails and say to him, "You are an infernal fool," and get him to see a little bit of it, he would turn around and say, "I guess I am about half-way fool."

You have heard the story of the father who had a son that was not very bright, and the boy was going to a party. His father said to him; "Now, just keep your mouth shut, and you will not make any mistakes." The boy said he would. A couple of charming young ladies came by and said to him, "Good evening." He said nothing Another came along with her friend and said to him, "How are you enjoying yourself?" But he never said a word. And the pretty girl said to her companion, "Oh! come along; don't stay here. You can see that he is nothing but a fool!" They knew him for a fool even with his mouth shut. A man often needs a good honest criticism from some one that does not know him. I have got it walking along the street: good, honest, wholesome criticism; and a good part of it was true! And I would think, "Now, look here, by the gods, I will change that part of it anyhow, if I can. He will not have a chance to say that again."

A short time ago I lectured in Boston. In giving the lecture I indulged in some flights of fancy on Vandyck, and now and then I suppose I used some word-painting. I tried especially to describe that scene where Charles I. was lying in his coffin, and Vandyck, stepping up to that cold clay of the man who had been his friend, took the necklace of lace and adjusted it about his throat, so that it would cover the wound made in severing the

head. I described the incident as vividly as I knew how. The next day the Boston *Transcript* came out and made some comments upon my grammar, referring to some slips that I had made. But the one thing that was troubling me was not that sort of a criticism; but it came to me as I journeyed home, "Look here, you described Vandyck as adjusting the necklace about Charles I.'s throat; now, what about that?" There was just a faint suspicion in my mind that my dates were not right. And I went to the library in the morning and looked the matter up, and I found that Vandyck had been dead eight years when Charles I. was beheaded. Now, the Boston *Transcript* did not see that. They did not see the graver historical blunder I made, but saw that I had slipped in some words occasionally that ought not to have been used just so, and did not properly round out the sentence. I am very glad they did not see the greater blunder, because they would have stamped my history, you know, as not "all right."

The week we celebrated the two hundredth birthday of Detroit I tried to find out just where the French came down and landed. I suppose I had a couple of hundred letters from different gentlemen to prove that they had landed all the way from the Old Point Club House, which is four miles from here, down to the River Rouge, which is seven miles distant. Now, I presume that any one knows that is a fact that we could not precisely determine. So we landed Cadillac as we thought he ought to be landed.

I speak of these things because I wish to acknowledge the importance of attention to the smaller details. We have to study the accessories, but we are not to give them too much importance. I have spoken again and again about this diagonal line—this line of obliquity. See how charmingly Boll employs it. Oh! I wish I had these pictures enlarged as much as it was possible—as big as the side of the house—so that I could the better show you their finer points, and you could all be able to see them easily. Some of you are not able clearly to see these small pictures from where you sit. If one can take time to look at a picture it will tell its own story. Every now and then you hear a man or a woman saying that the world owes them a living. Let me tell you, my friend, the world does not owe you a cent. "The world owes me a living" is a motto fit to be written over a den of thieves. The world owes you only what you work for, and when you work for the best things there may be people that will pass you by and say, "Oh! well, he is off the track." Never mind. You may be fifty years ahead of the profession you are in; but in this world every man is at the last measured for just exactly what he is worth by somebody.

De Bra was a man who painted the peasantry. He tried to get that effect of Arcadia; that which we have all read of if we have never seen; which we have dreamed of, but no one has ever realized, or will ever realize. His style contrasts strongly with that of Vandyck. I have two of his works here that I wish to call attention to as being portraits that are very charming in my estimation.

Raphael! How many of you have seen a boy like that, whose very soul shone out of his eyes; yet you have failed to get that soul into his photograph. Raphael made pictures that live, because he made them full of character. Here is a frivolous lady; you have all seen such an one many a time. Isn't that perfect truth to nature; something worth striving for? Can you do it? It is only by keeping to the old models that you will realize this. You have to give study and thought to your work to produce a picture like that. There is no background of any consequence; simple and quiet, yet it is filled with character that appeals to every man and every woman.

Hoffner, the great English portrait painter. See the charm that he puts into that child! Can you better it? Raphael and Michael Angelo, three hundred years ago, complained that the human figure had been represented in every conceivable position. There was no other attitude in which you could arrange it so you could express some new thought, or conception, or tell a new story. But, as I said to you a year ago, there are hundreds of romantic or soul-stirring stories connected with every stone, every rock, stream or vale in all this broad land that will furnish you inspiration for your subjects.

This picture by Lawrence is the portrait of the son of Napoleon I. Do you wonder that that father spent hours sitting in the chair at St. Helena wishing constantly for a picture of that son? While down at the little custom-house at Jamestown there was lying that oil painting which the officials would not allow brought up to him at Linwood, nor allow him to send for it. One man said to me: "If I owned a picture of my boy like that, all the possessions of a Rockefeller would not take it from me." You want pictures to live; yet do not forget the money side. Take people as they come to you. Do the best for them that you can; but bear constantly in mind that there is something higher which you are working for; something that will live. Use every means you can employ to secure this, and then you will make pictures that will live after you. I thank you.

President Core: You must none of you forget that at 2.30 this afternoon we will hear a most instructive and entertaining address by Mr. Lucius Hitchcock, Buffalo, N. Y. I would like you all to be present. This address will be concluded in ample time for you to take the trolley ride at 3.30.

On motion the Convention adjourned until 2.30 P.M.

---

SECOND DAY—AFTERNOON SESSION.

The Convention met pursuant to recess, President E. P. Core in the chair.

The President called the attention of the Association to the display of pictures by the Brush and Lens Club of Boston, and extended a general invitation to the audience to view the same.

President Core: Ladies and gentlemen, I have the honor to introduce to you this afternoon a gentleman who has won fame in the magazine world, and whose name is perhaps familiar to many of those here. He is just from Buffalo, a place where I understand that electricity has created new history in the light world, and he is, perhaps, in view of that, more than usually endowed to shed light on art subjects. He will now address you—Mr. Lucius W. Hitchcock.

## *The Elements of Composition.*

It is evident to a discriminating observer that the old-fashioned, purely mechanical photograph—I mean simply the work of a machine—is doomed to disappear. Not but what one still finds such displayed in glass cases in all our large cities as well as in the country towns, where the crayon portrait flourishes, but one is also glad to notice the work of men who are really artistic—men who do something more than simply push the button.

No one is more astonished or pleased at the progress you have made than the painters. As your work grows more refined and artistic you are cultivating the popular taste in the right direction. The art of photography has done much for that of painting. The animal painters were struggling in the dark until the camera came to their assistance, revealing to them the real movements of animals. Photography, like painting, has its limitations; but one can help the other, and they should go hand-in-hand. I have had many a hint from the camera, and I should be pleased if on this occasion I can impart a few hints on composition in return.

What you have already done along the lines of artistic work, beyond the mere represensation of nature, has been remarkably artistic and promises much for the future. It seems to me that the technical side of your

profession has been carried almost to perfection. Your new papers of various kinds are capable of giving the most tender and plastic qualities. Your lenses are becoming more perfect every day, and you, who use them, seem to be keeping pace.

If a picture is beautiful it must be good in one or all of three things: color, composition, and drawing. Your work as yet is limited to monotone. As for drawing, the camera is the greatest draughtsman in the world. So in pictorial photography, your problem is largely a matter of composition or arrangement.

I shall endeavor in this paper to give you the principles that govern composition and the reasons for them when there are any. In the broad field of art, however, one can only give theories on which to work. The essence of art is originality, and not a thing to be labelled with anyone's rubber stamp. If there is one thing that art abhors more than another it is dogma; so that, in what I shall have to say, consider it rather as a principle along which you may struggle toward the light than a set of rules or recipes by which to make a picture. Let me be frank in the start. If you do not feel the thing and do not have it in you your progress will be doubtful, for art is not so cold a thing that it can be handed around like a recipe for doughnuts. It can come only from the soul, whether the instrument of its expression be a camera or a brush.

Composition is the art of arranging the objects to be depicted so that the eye shall be gracefully led into the picture and centred upon the important thing; or it shall be such a combination of spaces so varied with light and dark as to make a decorative whole.

Variation, you must know, is the keynote of good composition. The skilful variation of space, light, and color, or light and dark, covers the entire field. This scheme of variation is born of nature itself. It governs every beautiful thing in the world, and has its culmination in the human figure. For instance, take the arm. The upper arm is heavy and stout; the forearm is longer and more slender; the hand is of another form, with fingers of varied lengths, each finger with three joints of a different length, tapering to the end. The vegetable kingdom is constructed on the same plan—a tree, with its limbs of varied length and thickness, tapering to the leaves, whose veinings repeat the construction of the whole.

I wish to make this principle of variation and its relation to art as clear as possible, so I shall start from first principles—the variation of flat spaces as applied to decorative design.

Arthur Dow, in his little book on *Elementary Composition*, makes an attempt to show that the essential quality of any composition is its decorative value, making the realistic representation of secondary importance. He re-draws several masterpieces in their big masses of light and dark, omitting all detail, to prove his statement. In other words, he claims a picture should be beautiful from the mere arrangement of light and dark within a given space, regardless of what it represents, and he carries the same principles that govern flat decorative design into picture composition itself, and his examples of the principles of space variation are so vivid and clear that I shall give you in a rough way some of them.

Mr. Dow commences with the idea that pictorial art is a space art. First of all, the filling of a flat space; in putting anything into it the variation of spaces should be the first consideration of composition, whether it is a design or a picture.

If we place an object in the centre we have no variation at all, as all the spaces between it and its borders are equal. He will take, for instance, a simple square and show how much more beautiful it is when broken up into varied spaces than when like spaces are used. The square, to begin with, is not so attractive a space to put a picture into, because its sides are not varied, hence monotonous.

Fancy the square broken up into equal spaces, like a checker-board, without the ordinary variation of dark and light, and we can scarcely conceive a more monotonous figure. It has no beauty or artistic value whatever. Now, on the other hand, let us take the same square and break it into varied spaces, still using straight lines, and still going directly from one side to the other. At once art appears, and we have something interesting. In both cases the design was limited to the square and straight lines in two directions. (The speaker here illustrated by sketches on the blackboard.)

Now carry the variations still further, and use varied lengths and widths of lines, and your combinations are more beautiful.

Add to this oblique and curved lines, with color, and we have all the elements that go to make a beautiful Persian rug

The rectangle, with its unequal sides, one being longer than the other, will for that reason lend itself more readily to a greater and more pleasing variety of spaces. Consequently it is a more interesting shape for a picture or a design.

These same principles can be observed in a beautiful tower, a fine old sideboard, or the facade of a building.

This may seem a little remote from the subject of composition, but I shall endeavor to show you how these very rules are directly applicable to the composition of a picture.

It very often happens that the principal masses of your picture are rectangular in form. If you have a subject that takes in a doorway, buildings, tables, chairs, etc., the placing of these rectangles, one within the other, will play a large part in the composition of your picture; and they should be so placed in relation to one another and to the picture boundary as to give the most pleasing variation of space.

For instance, take a small rectangular arrangement of an old Japanese print. (Referring to sketch of same.) You will notice that in placing these rectangles the artist was careful not to repeat areas; that is, to get the greatest possible variety of spaces. Very often you will discover you can greatly improve a picture by trimming it in a different way. This is something you have already known, no doubt, and you probably have already noticed that your picture looks best when trimmed to give the greatest variety of spaces

It is often true that the same subject may be photographed in several different ways, all of them good, by simply playing upon different combinations of spaces.

We will now consider the arrangement of a simple little landscape, and see how much we can make of it, purely by the variation of its spaces, using the same principles that we applied to our rectangular arrangements. (Sketching.) Now let us try another arrangement of the same thing.

A certain judgment, however, must be used in preserving balance as well as in getting variety. If the principle of variation is carried beyond reason, to extremes, the sense of balance and proportion is destroyed. These are things you must feel in order to do successfully. No one can teach you.

We will now treat the same little subject at much closer range. (Here the speaker again had recourse to the blackboard to illustrate his point.)

I want to warn you against making an infallible rule for this scheme of arrangement. You will discover that art is far worse than English grammar. You no sooner get a rule than you are told there are many exceptions to it. For instance, you have been told to get the *greatest possible variety* in your spaces; but there is another kind of composition, of a more conventional type, in which the repetition of a form or space gives dignity and effect. Numbers are dignified and effective when they are not monotonous. But even conventional composition is simply another form of variation. Like figures side by side, or like figures or forms on either side of a common centre, though in themselves monotonous, give variety and contrast to the individual figures or forms that are in the same composition. (Illustrating.) Nearly all the large mural decorations of Puvis de Chavannes are constructed on this scheme, and lend themselves well to architectural surroundings.

Up to this point I have talked about the variation of *space* only, important as far as it goes, but only one-third of the problem of composition.

I now wish to speak of the variation of the line, of its peculiar kind of beauty, and why it is so. Take a straight line. It certainly is not artistic. Nature knows that, for she will have none of them. Take varied combinations of a *straight* line. These are more beautiful, and are capable of good geometrical design.

Now let us take the arc or circle. As a line it is still more beautiful, but it has no variations, and is monotonous, like the other.

Now, take the *variation* of the curve, and you have the most beautiful single line one can draw, the compound curve, or the S line. It is this S line that plays such an important part in composition; not that we see the line actually drawn in the picture, but we feel the *sweep* and *grace* of it running through the entire arrangement.

I don't like to be dogmatic, especially about that which applies to art, but in a perfect composition the point of view should be presumably from the centre of the picture, in front; and the eye should be drawn into the pictures, describing a graceful S line as it goes

from one point of interest to another, until it ends in the distance. For instance, in the little sketch I have just drawn we are presumably just outside of the frame, in the centre. The first thing that arrests our attention is the large tree, notwithstanding it is quite a distance from us. Looking again, you will observe the shore line has conspired with the large and small stones in the foreground to make a graceful curved line that unconsciously leads the eye to the main point of interest One does not *actually see* a curved line in the picture, you understand, but the eye, in passing from one thing to another, is led in the path of a curve. The tree itself carries out the curve, turning it back into the picture, and the birds in the sky complete the S. It gives what one would call a fine sweep. This S line is the mainspring of good composition. You will observe its softening influence over angles in nature. She artfully rounds them over or softens them by adjacent lines, and you will do well to take a lesson from the human figure, as it combines all the essentials in the beautiful variation of line as well as mass and color. So, in passing, let us take a look at it.

The ugly and repulsive angles of the skeleton are softened and made beautiful by the soft, flowing, compound curved lines of the muscles that cover them.

We have discovered that the curve is more beautiful than the angle, but the curve often needs the abrupt strength of the angle, to show off its more subtle charm. However, the curve must be the *important* line, and you can always manipulate your lights and darks with your accessories so as to soften any angular abruptness.

Sometimes an angle is so obtrusive that it is expedient to cover it up entirely; but straight lines and angles give a certain strength and make a good contrast to the S line, as well as a variation of it. In fact, you must constantly keep the thought of variation before you. One quality will beautify another, while if like qualities are used we have monotony. It is like a voice with too much tremulo, which, when used all the time, ceases to be effective, even giving a sense of weakness, but which, when properly varied with clear, even tones, is very telling.

We have considered the variation of *space* and *line*. We will now consider the variation of *color* and *light* and *dark*, the manipulation of which has more to do with the *poetry* and *feeling* of a picture than *any* of the other elements of composition.

I shall speak of *color*, as the term is used by illustrators, meaning richness of black and white. The two extremes of your palette are black and white, something you must appreciate from the beginning and use discriminatingly. They are your last trumps. Don't play them too quickly. If you are very lavish of one or the other, or both, all over the picture, you have nothing left for the accent or the effective touch. Be willing to sacrifice certain things for the beautifying of something else. Now, black and white are naturally most effective together, and if you will carefully keep both of these extremes, that is, pure black and pure white, out of the bulk of the pictures, saving them for the important place, where you can bring them into strong, sharp contrast together, you will discover how effective they are. Too much black in a picture takes the atmosphere out of it. Pure black is local color and is not transparent. If you can photograph the air between your lens and what is a dead black background in nature, it will not come out quite black in the picture, and consequently will not take the force out of whatever black accents you may have in the middle distance.

This abuse of black and white is a common defect in the ordinary photograph, due, no doubt, to the inability of the camera to render accurately color values

By the variation of your lights and darks you can do most anything you wish. You can place the interest where you please, soften some lines, bring out others, and aid the ordinary lines of perspective in making the picture's depth more effective.

I should like to speak of depth as a quality, not apart from spacing, line and color, but rather a very beautiful result to be had by the skilful use of them all.

Simply straight, single point perspective is stiff, of course, though all lines that lead *into* a picture are good. Take a railroad and telegraph wires. Here we have simple geometrical depth, and to a great extent the effect is pleasing, but the lines are long and unbroken, with no variation, and consequently monotonous. It isn't what one would call picturesque.

Now take a little sketch by Anton Mauve—"Sketching." This, like the railroad, is built on a general plan of single point perspective; but the lines are broken and the light and dark masses are so varied as to draw the eye *into* the picture along a pleasant swaying line, bringing the strongest contrast into the middle distance. Never put the strong contrast into the immediate foreground of your picture. It is far more effective in the middle distance, attracting the eye at once and giving a sense of depth that is very pleasing. This is a common trick of most illustrators.

Another way of getting depth is to contrast the planes of your picture with light and dark. A shadow thrown over the foreground will concentrate the interest more definitely on the principal object under full light in the middle distance. Often the principal group, treated in dark silhouette against simple light in the plane beyond will increase the depth of the picture. Cloud shadows will often make very pleasing combinations this way, giving a sense of greater depth, as one line of distance is silhouetted in light or dark against the plane beyond. Placing several planes of perspective with different vanishing points, one behind the other, is also an effective way of getting a beautiful sweep and a sense of great depth; but in doing this, great care should be used in keeping the interest *in the* picture, and not allowing the lines of the first plane to run abruptly *out of* the picture. It can be avoided by skilfully using your accessories, or parts of the picture itself, to turn the line back into the picture.

[At this point the lecturer further illustrated his positions by employing lantern slides, showing some fine specimens of work by Abbey, Sargent, Whistler, and other famous artists.]

I have a slide of a painting by Abbey that illustrates this perfectly. I should like to say, right here, of your picture the same thing that William Morris says about your home: "Have nothing in it that is not either useful or that you believe to be beautiful." The accessories of a composition have no business there unles they fill a space, carry out a line, or help to tell the story. Don't put things around unless they have a definite purpose. Don't put everything you have in the studio in the picture. Nothing is more stupid than that. Everything in the picture should be for some purpose of composition, and anything in excess of this only detracts the attention from the principal point of interest. Professor Loefts, of Munich, said, when something was wrong with his picture and he couldn't make up his mind what it was, that he *took out* something on general principles—*a safe rule for anyone* to follow.

In figure compositions you must utilize the beautiful lines of the figure itself, so arranging one figure with another as to carry out the graceful line of each, and the articles of apparel and details must be so arranged as to complete and beautify these lines. The smallest thing is often enough to give direction to a line and carry out a beautiful sweep, even to the falling of a bit of lace and the arrangement of the hair. If you will study the compositions of Gerome, Aimee, Morot and Meissonier you will discover this to be true.

Compositions, like fortune, are made by looking after the little things as well as the big; but this does not mean that you must see all the detail you can. As a rule the camera sees too much, and you must arrange your subject and manipulate your lights so as to overcome this. If one plane of your picture has a great deal of detail in it, be sure the plane it relieves against is simple. The eye must have a place to rest as well as to feast. As Hunt says: "Don't blister your picture all over with facts." Try to make your pictures more suggestive and less literal. I have seen photographers purposely make negatives a little out of focus to accomplish this, but I have never seen an interesting result from this sort of treatment. Things are then monotonously vague, which is monotony just the same and no improvement over a photograph that is too hard.

I should like to say a word about the general tone and feeling in pictures. You have heard it said that a picture is good because it stands out. This is a great fallacy. Your picture, rather, should stand *in*, and be enveloped in the atmosphere. Make a point of always photographing the air as well as the subject. The intense realism of a photograph is its only vulgarity. As I said before, make them more suggestive and less literal. Remember that art is something more than mere copying of what we see in front of us. Realism itself is vulgar, and belongs to the same class of art that one finds in Mrs. Jarley's Wax Works, or the ambitious

framer who defaces a beautiful picture of a lion's head by placing real bars into the frame, to represent the cage, with a padlock on the outside.

If you can sacrifice by the use of your screens what the painter purposely ignores, the artistic qualities of your photograph will be greatly improved. The trouble is the camera sees too much, and sees everything equally well. The artist with the camera *stops* its seeing powers for the unimportant details, and by this sacrifice makes the important things tell the more.

As Hunt says, "All notes in music are not high. There must be low tones as well. Put in only such details as will help the masses. Don't have your work all trills."

Before I stop I want to give you a little hint as between artists. Get your impressions from nature, and don't try to manufacture them in cold blood. Art is largely a matter of seeing. It is the same old story of a young student starting out with his sketching outfit and walking four miles to find something to paint, and the master doing beautiful things in his back yard. Not that everything is beautiful and worth painting, for it isn't, but there are lots of beautiful things that you will pass every day because you have not the eyes to see them.

Keep on the alert for beautiful combinations and arrangements all the time. You are just as apt to see them in the street car as anywhere else, and if you store up a reserve of souvenirs of this sort you will do more original and better pictures. It is far better than copying what another fellow sees and does before you.

THIRD DAY—MORNING SESSION.

The convention was called to order at 10.30 A. M., President Core in the chair.

Immediately after the President had rapped for order there was a round of applause in consequence of the arrival of Mr. J. F. Ryder, who came in response to the invitation officially sent to him yesterday upon the motion of Papa Cramer. Mr. Ryder came forward to the platform, where he was received by the President and given a seat alongside of ex-President Potter and Mr. Jex Bardwell.

Mr. Ryder said: Ladies and Gentlemen and Old Friends: I feel peculiarly happy to meet you to-day. I was honored yesterday by a call from you to come, and, as a big Indian would say, "You sent for me, and I am here." I am very glad to see you all and to see the association prospering; and I hope I will have the pleasure of meeting you on many future occasions.

President Core: I wish to announce this morning that there are two exhibits which, perhaps, many of you have missed. They are worthy of very careful consideration. The first I shall mention is the Historical Exhibit. We have in the little room above all the old daguerreotype apparatus and some of the old pictures that were looked on and prized by the people of that time. They are still deserving of appreciation and examination. This exhibit includes the collection kindly loaned us by Mr. Benjamin Falk, of New York. The daguerreotype exhibit was loaned us by Professor Laudy, of Columbia University, of New York City. The paper prints were loaned by Mr. W. I. Scandlin, of *Anthony's Bulletin*. These are all in the business manager's office, to the left as you go up the stairway, leaving the hall that takes you to the exhibition floor. Then, the Ohio-Michigan Salon is in the room over the ladies' parlor. The same entrance that leads past the Historical Room leads up to the Ohio-Michigan Salon.

I had hoped that I might have been able to hear from some of our old landmarks in photographpy; men who have made photography and themselves famous. I know that they could entertain us, but suppose that we will have to forego that pleasure on account of the pressure upon our time. Among those whom I refer to there is Papa Cramer; Mr. Rockwood, of New York; Mr. Decker, of Cleveland; Mr. Jex Bardwell, and several other old friends. If we had the opportunity to hear from them we know that it would be a source of great pleasure and profit to us.

Next in order is the reading of communications.

Secretary Nussbaumer read the following:

CINCINNATI, OHIO, August 6, 1901.

E. B. CORE, President,
Detroit, Mich.

Greetings and good wishes for success of Art Convention.

E. M. CORE.

The President called for the report of the Committee on the St. Louis World's Fair, which was submitted by Mr. Pirie MacDonald, as follows:

*Report of World's Fair Committee.*

Mr. President: The sense of the committee is embodied in a resolution which was carried in a meeting held by that body, which reads to this effect: That this committee heartily indorse the scheme of a separate building for photography at the Louisiana Purchase Exposition, as presented by Mr. Strauss, and recommend that a committee of three be appointed by the President to treat with the proper authorities, and to report at our next annual meeting. I am given to understand by Mr. Hammer that to make a report at the next

annual meeting will afford ample time, and it was on that assurance, I believe, that the committee adopted exactly that form of recommendation. It being a rather knotty problem as to who they were to report to, and in case it required action prior to our next annual convention to appoint a committee with power to act and responsible for your sentiment in this matter. This was something that we did not quite understand how to arrange, so we joined in this recommendation that the association appoint a committee.

Mr. Seavey: I move that we adopt the report of the committee.

The motion was seconded.

Mr. Frank Hammer, of St. Louis: I would like to amend that motion to the effect that this convention now declare that we will meet in St. Louis in 1903, in order that the exposition people may understand that we are coming for the purpose of visiting the exposition at that time and of holding our convention at the same time.

Mr. MacDonald: Might I suggest that there is sometimes weight in propositions that have not been decided? Is it possible that we might be able to arrange for better treatment at the hands of the Louisiana Purchase Exposition authorities if we were not to decide absolutely to-day on St. Louis, as a matter of policy? I simply ask Mr. Hammer the question because I believe that he understands matters of that kind probably better than I do. But it occurs to me that way.

Mr. George B. Sperry: That cannot be done without altering our constitutian.

Mr. Hammer: I think possibly we could gain better terms from the management of the Louisiana Purchase Exposition Company if we decided now to go there that year. As you all know, there is nothing impossible in St. Louis. Everything is possible.

Ex-President Potter: It is certainly not within the power of this convention, outside of the constitution, to bind the action of the future convention.

Mr. Hammer: Mr. Chairman, I shall withdraw the amendment, because I know you will be there anyway. [Great applause.]

President Core: That brings us back to the original question. Are you ready for the question?

Mr. Van Norman: I would ask to have the report read again.

This request was complied with, after which the President put the question on the adoption of the report as submitted, and the same carried unanimously.

Mr. Hammer: I now move that the 1903 convention assemble in St. Louis, if practicable at that time.

President Core: It seems to me that that motion is not according to our constitution, and therefore is out of order. I think you need not worry at all about St. Louis; no trouble about that.

Mr. Hammer: I am not worrying.

President Core: I think that is a foregone conclusion; but we would be exceeding our rights as a convention if we should attempt now to bind the action of the next meeting. Next in order is the report of the Committee on Nominations.

Ex-President W. H. Potter, chairman, submitted the following:

*Report of Nominating Committee.*

Mr. President, Ladies and Gentlemen: The Committee on Nominations beg leave to report that they met and organized and appointed Mr. William Armstrong secretary. After a thorough consultation and full consideration of suggestions made, we now unanimously report the following officers; and when I say unanimously, I mean that we all voted for the parties that we recommend, except our chairman, who did not vote in any instance. He was only to vote in case of a tie.

*President*—George M. Edmondson, Cleveland, Ohio.

*First Vice-President*—H. S. Klein, Milwaukee, Wis.

*Second Vice-President*—W. H. Armstrong, Boston, Mass.

*Secretary*—C. R. Reeves, Anderson, Ind.

Respectfully submitted,

W. H. POTTER,
Chairman.

Without objection the report of the Nominating Committee was received, and the President then stated that before inviting further nominees from the floor it would be in order to first consider the selection of

the next place of meeting, and called for nominees in that regard.

*Mr. Nussbaumer Nominates Buffalo.*

Mr. J. George Nussbaumer: I have the honor and the pleasure to place Buffalo in nomination as our next place of meeting. Buffalo has a great many resources. It is a beautiful place to go. I know the people there are cordial and will treat you right. We have a large convention hall with all facilities. We have excellent hotel accommodations, than which there are none better, and we have all those little things that go in the aggregate to make for the comfort of the convention. I would like to place Buffalo in nomination for the next place of meeting. [Applause.]

Seconded by Mr. R. P. Bellsmith, of Cincinnati, Ohio.

*Mr. Carl E. Ackerman Nominates San Francisco.*

Mr. Ackerman: I desire to place before the convention the name of San Francisco. (Applause.) First, before I forget it, I want to say to you that we have hotel accommodations, too, the same as Buffalo. We all will remember Buffalo's hotel accommodations long after we go away from here. I think you can get a room there on the European plan for about $7 a day. Now I have nothing to say further on that, but I wish to welcome you to the Pacific coast. Every single soul in this hall knows what we have on that coast, and there is not a soul here that does not wish to go. The only argument that has been advanced by those who desire to take this convention to Buffalo during these sessions here has been that it will cost too much money to go to San Francisco. That is the only argument. I say to you that the argument is a strong one, it is one that has kept thousands and thousands of Easterners from coming to the Pacific coast and staying there; but during the last several years we have had on the Pacific coast conventions of bricklayers, conventions of Epworth Leaguers, and other conventions that have come there and paid their way and have gone back to the East echoing the sentiment that San Francisco and California offer more to enjoy than any other portion of the United States.

Now, as far as accommodations are concerned, we are used to caring for large conventions, with that hospitality for which the West is famed, a hospitality that knows no bounds, that stops at nothing; the hospitality that will make every man feel at home; the hospitality thas is known all over the world, and will be known as long as California is on the map. We have a convention hall in San Francisco as superior to this as it is possible to be—constructed solely for conventions. We have hotels there that are as cheap—and cheaper—than any hotels in the East, with far better service and with that grub that only Californians know how to provide. (Applause.)

Now, I know that the principal thing in which you are interested is the matter of railroad rates. I would state that in 1902 the Knights of Pythias, who held their last meeting in Detroit, will meet in San Francisco, and the same objections that have been raised to San Francisco here during the last several days were raised during their meeting in this city. But the railroad and California were anxious to take the Knights of Pythias to the coast—and, by the way, they are far more anxious to get the photographers—and so they offered the Knights of Pythias an inducement that has never been offered before, and probably never will be again. I wired last night for a definite proposition, that I might present it to this convention. I was assured in writing by the men of the Southern Pacific Railway Co. that the same rate that applies to the Knights of Pythias Convention, which will be held in August, will apply to the photographers. That rate is one-half the round trip fare, plus $1. We have been calculating during the last couple of days what the probable cost would be, and have decided that any photographer who can scrape up $100 can go to the coast and have the best time of his life, and remember it ever afterward; and we invite you to come with our whole hearts.

A delegate inquired what the regular fare is from Chicago to San Francisco.

Mr. Ackerman: Sixty dollars, but the round trip fare is cheaper. It would be half the round trip fare from given points, plus $1.

Mr. MacDonald: Mr. President, ladies and gentlemen, we have heard the charms of California extolled before. They tried to stampede us to Denver once. An old Californian was telling me only yesterday that it was impossible for him to see his old friend, Percy King, who is in 'Frisco, because it would mean an absolute shutting up of his shop for three weeks. We are not bricklayers. We are not all of us Knights of Pythias. We are not people that can afford that amount of time. (Applause.) We are here in the centre of the biggest photographic population that the world holds to-day. (Applause.) And if we were in Buffalo we would be in exactly the same situation. (Applause.) It is utterly impossible to find any point east, west, north, or south to which you can get as easily as to Buffalo. The Western people have always been delighted to come east, and the further east they are able to get the more they thank God. (Laughter.) The remark that Prof. Griffith made yesterday in regard to Chicago holds good in regard to Buffalo as compared with San Francisco. It is three or four hours ahead of time, and we cannot afford to go away out there and lose our time.

Gentlemen, it seems to me absolutely out of the question to ask people who have absolute and definite business interests—not bricklayers, but people who have business on whom reliance has to be placed personally—to give three weeks' time in that way, so that every one of you practically shuts up shop when you leave. If the rest of you can do it, go on. I cannot.

Mr. Nussbaumer: Buffalo has sent one of her officials to Detroit to officially invite the photographers of America to come to Buffalo in 1902. Mr. Treat, if you please,

will you make your proposition. (Applause.)

*Remarks of Mr. Curt M. Treat.*

MR. PRESIDENT, LADIES AND GENTLEMEN: I thank you for this privilege of speaking for the business men of Buffalo as well as the representative of the municipality, His Honor, Mayor Diehl. On their behalf I thank you for the privilege of extending this invitation. Buffalo has four times in succession sought your presence. Four times her hand has been out; and I will say now, whether you go there next year or not, that the hand of welcome will continue to be extended to you. (Applause.) However, I do think that Buffalo is entitled to your next meeting. You will remember, those of you who attended the meeting in Milwaukee and talked for Buffalo for 1901, the plea that was made by the good members from Detroit and Michigan in their anxiety to have this meeting. They said to us then, "Now, Buffalo, you step aside this year and you shall have it in 1902." Much as we wanted to entertain you in 1901 we had to step aside. Now we say, "Come in 1902, you have promised." I am surprised that my friend from 'Frisco should allude in the manner he did to hotel rates. I will guarantee I can go to 'Frisco and pay $20 a day for a room. I will guarantee you now, my friend, that if you will come with me I will give you at this time, while the Exposition is in progress, as nice a room as you ever slept in for $1.50 a day. You do not have to pay for the reputation of a hotel unless you wish to. The idea advanced as to hotel rates was entirely wrong. I notice that my friend from 'Frisco quoted no figures whatever, he simply referred to the convention of the Knights of Pythias. Now, I was formerly in the passenger business.

Mr. Ackerman: I quoted figures, sir.

Mr. Treat: I know a little bit how rates are made, and it is just as impossible for my California friend to get a rate now from here to 'Frisco to hold good in 1902 as it is for me to fly from here to Cleveland. These rates are fixed by the Passenger Association, and no one railroad company can do that. They act jointly. There is a Trunk Line Association, a Central and Western Association, etc. The Southern Pacific Railroad as a road can make its own rates so far as its own line is concerned, but it cannot control connecting lines of the association or their rates. I would not pretend to give a man a rate to Buffalo now to be operative a year hence. It would be ridiculous for me to do so. I only say that you will have given you next year as good a rate as can be obtained to any other point on the American continent. (Applause.)

Now, as to hotel accommodations, etc., I would not, for one moment, cast any reflections upon Detroit or upon the manner in which she has entertained us or the accommodations which she has furnished. I think they are splendid; but I do say that the city of Buffalo has the most complete, most perfect and most convenient and pleasant room in what is in every way a model convention building of America.

Briefly, the room which we will give you for your exhibit room, the main auditorium, would accommodate 7000 people. About twice the size of the exhibit room which you are using here. The room which we will give you for your meeting place will be the banquet hall, which will seat 700 people nicely and conveniently. It is open on all sides. The ventilation is perfect as can be, and there is free access of the breezes of Lake Erie, which are wafted in to embrace the gentle zephyrs from Lake Ontario at all times. (A voice: "Amen.") We will give you all the special rooms that you want for special exhibits and for committee rooms. We can accommodate in this building eight different conventions at one and the same time. We offer you this, and we will guarantee you that you cannot get anything better and satisfactory on this continent.

Now, I do not wish to take up your time, but there is one other strong point which my friend here referred to. I have, as I say, attended your meetings for the last four years, and I have noticed the increasing interest. I have seen the advancement in your Association, not being one of you as a photographer, but I could not help seeing it. The interest is increasing, and your membership, too, year by year. Now, what is the best business principle for any man who wishes to do business? I take it that you gentlemen in this Association wish to conduct it on business lines. In the first place, to make your meeting successful you must have the people, and you must go where the people are that you are to do business with. Within one single night's ride of Buffalo—and in that night you are not losing time, for you get into your sleeper this evening and to-morrow morning you are at Buffalo—over one-half of the population of the United States are located, and out of that forty-three millions there is the same proportion of photographers.

Now, then, I would like to go west. I like Western people. I was born there myself. But you people as business men cannot afford, magnificent and grand as the country is in California, to take two or three weeks to travel through it, or perhaps a month's time. It is not the matter of railroad fare to San Francisco, even though you go out there and back for $100, but you cannot take a month, or, to see it properly, two months of time from your business. I know it is not a question of money, but your business is worth something, and you cannot afford to neglect it. Finally, as a representative of the business men of Buffalo, and representing the largest commercial organization, the Buffalo Merchants' Exchange, we would invite you to come to Buffalo. We do want you there. I want you there, and we bid you come.

A voice: "Put us off at Buffalo."

Mr. Van Norman: Personally, I would like very much to take a trip to San Francisco; but, as Mr. Treat says, I know that while the Convention of previous years could not control this Convention, at the same time there has been a decided understanding for two years to my knowledge that Buffalo should have the next show. As has been stated, it is the most accessible place in the country, probably, and I most heartily second the nomination for Buffalo.

The question was called for.

Mr. Ackerman: In consideration of the feeling expressed by the gentlemen who have spoken, and in consideration of what I have been advised to do by my friends and by the friends of San Francisco, I am going to withdraw San Francisco from consideration now (applause), but watch out for 1904. You will spend your three or four weeks in California in 1904. We will take you there if we have to take you there in cattle cars—or Pullmans. We will take you there and give you the time of your life. Yes, that is all right, Buffalo. (Laughter.) If I did not know I was beaten I would not say it, but in 1904 we want you to come there. We want to show you what we have got. We will all go to St. Louis. We have out there some photographers who would like to see you fellows; but because you do not want to go there now is no sign that you do not want to go there in 1904. Are you going to help me in 1904?

Mr. Treat: I am with you.

On motion of Mr. Nussbaumer, seconded

by Mr. Giffin, the nominations of place of meeting were now closed.

Mr. Giffin: I move you that Buffalo be made the unanimous choice of this Association for next year.

A voice: Second the motion.

Another voice: Third the motion.

The motion was put and carried unanimously, and cheers were given for Buffalo with great applause.

President Core: We will now take up the election of officers.

Ex President Decker: I move that the Secretary be instructed to cast the ballot of the Association for the election of George M. Edmondson, of Cleveland, as our President for the ensuing year.

Carried unanimously, and so announced.

President Core: The next in order will be the election of First Vice-President. The regular nominee is Mr. H. S. Klein, of Milwaukee.

Mr. Max Teuber, Chicago, Ill.: Mr. Chairman, officers, and members of this Association, I take great pleasure in placing in nomination a man whom you all know, a man whose work for the past fifteen years has been found upon the walls of your Convention, and who every year during that time has travelled thousands of miles to attend the Convention. A few minutes ago Buffalo got your Convention. Why? Because San Francisco was too far. This man is Mr. Frank L. Schumacher, of Los Angeles, Cal. (Applause.) He is a prince of men, and if you believe what Mr. Hollinger said yesterday you will appreciate the fact that he is always pleasant, and he is the right man, too. Therefore, Mr. President, I place Mr. Frank Schumacher, of Los Angeles, Cal., in nomination for First Vice-President of this grand organization. (Applause.)

The nomination was seconded.

Mr. MacDonald: Mr. Chairman and gentlemen—ladies and gentlemen—I always forget to say ladies because I am making pictures of men only. We have to-day regularly in nomination a man whom it has been my privilege to have as a personal friend for years. We have a man who has been regularly placed in nomination; a man who has been a faithful servant of this Association; a man who has been so completely a friend of mine that when I was approached this morning on the subject of placing another man in nomination an involuntary "No" came from me. But I have another man in mind who has served this Association equally as faithfully and in the most arduous position that we have—which we call a keynote—a man who has been dray-horse for the Association for two years. I am not going to place his name in nomination with a plea for charity, because he has done yeoman work. I am not going to ask you to reward him, but I want to place in nomination the name of George Nussbaumer, of Buffalo. (Applause.) I want to place him in nomination for the one reason, if for no other, that it has not only been customary, but that custom has originated from a wise provision, that an executive officer was necessary in a town where we have the Convention, and that it was a foregone conclusion that Buffalo was to be selected you all know. That you should so far have forgotten, not your charity, not your good wishes and "gifts," but that you should so far have forgotten the wisdom of putting a man from a town in which you are to hold your Convention on the slate I cannot understand. We know him as a man and as a gentleman and good craftsman, and one of the most infernal hard workers that God has ever blessed this Association with. (Applause.)

Mr. Giffin: If a second is in order I second it.

Mr. Guttenstein: I simply want to say that Mr. Klein, who is on the slate for First Vice-President, although he lives in Milwaukee, nevertheless is a "Buffalo."

Mr. Hollinger: I am a friend of all these gentlemen, as well as of the man from California as from Milwaukee. These men will each get a chance when we go to their respective localities. I am in favor of Mr. Nussbaumer because of what he has done for us in the past. We should not turn our faithful officers down here, but should promote them, so that all our officers will serve us more graciously.

Mr. Frank Schumacher: This nomination has come entirely unsolicited by me. It is an entire surprise to me. I withdraw in favor of Mr. Nussbaumer. (Applause.)

Mr. Teuber: Pardon me, but, according to parliamentary ruling, I am sorry to say,

Mr. Schumacher, that you cannot withdraw unless I sanction that request.

Mr. Schumacher: I do not wish to run for office. I realize that, situated as I am, correspondence will take a long time in passing, and I think it for the best good of the Association that I withdraw. I thank my friend for the honor of placing my name before the meeting.

Mr. Teuber: The reason I placed his name in nomination is that you have not a man slated for office in the entire West. I am from the city of Chicago.

On motion of Mr. Giffin, nominations were closed.

The President appointed as tellers Mr. R. P. Bellsmith, Cincinnati, Ohio; J. E. Giffin, W. Va., and John Schneider, Columbus, Ohio.

President Core: The tellers will now proceed to collect and count the ballots.

While this was proceeding, Mr. C. L. Weed, of the Aristo Company, announced the programme for the afternoon and evening excursions given to the P. A. of A. and ladies by the Aristo Company, the first boat leaving at 1.30 P.M. for the Rushmere Club House, St. Clair Flats, returning in time for supper; and a second boat to leave the same dock at 8.30 P.M. for a moonlight boat ride, dancing and refreshments.

President Core: While the tellers are finishing their count of ballots for First Vice-President, in order to save time we will hear from the man with the unsatisfied ambition—Mr. F. Dundas Todd, of the *Photo-Beacon*, Chicago.

### *My Experience in Twelve Studios.*

MR. PRESIDENT, LADIES AND GENTLEMEN: It is with mixed feelings that I stand up to say a few words to you at the present time. Detroit brings back to me a great many very pleasant memories. It was in Detroit in the year 1895 that I was first allowed to address the National Convention of the Photographers' Association of America. I will never forget that first speech. At the end of the meeting, as I wandered to the end of the hall, one photographer came up to me and said: "Mr. Todd, I want to introduce myself. My name is Somers, of Memphis, Tenn., and I want to tell you that I like to hear that Scotch tongue of yours." I felt a little bit good, you know. I said "Yes." He says, "Yes, Mr. Todd, I am rather a bashful man; I like to stand at the back of the hall here, and you are the only man I can hear." I did not feel so good after that. The following day I had a little fight with one or two members of the convention over the proposition to permit editors to go into that meeting without paying $2 on condition that they were good. I could not understand that condition at all; I opposed it. After the meeting was over another photographer came up, and he said, "Todd, you are a gigantic ass." I had to admit that in all probability that was true. The following day, in wandering through the art gallery, looking at the pictures, I saw pictures by one man that excited great admiration in me, and I could not keep my mouth shut. I had to tell all the world what a fine thing I had found. The photographers gathered about me, and while I was excitedly telling all about this fine collection, a man came rushing into the crowd like a flying wedge, took me to one side, and said: "Todd, you are crazy; though if you keep your mouth shut the boys won't know it." [A voice: "How did you find that out?"] I turned to him and said: "I will make you crazy within a year." And I think I did.

Another picture comes to me of the Detroit Convention of 1895. Those photographs that I first spoke of as interesting me so strongly made we wish to meet the man that had made them, and I told everybody, "If you see that man, bring him to me." It was not twenty-four hours until I met him. Then he came up to me and said: "I believe you wanted to see me." I said, "Is your name Hollinger?" He said, "Yes." I said, "I want to tell you that your work has given me more pleasure than any in the hall." [A voice: "That's all right."] (Applause.) And I saw two little drops of water gathering in that man's eyes, and he said: "Mr. Todd, I am glad to hear it; you are the first man that has said to me that there is anything good in my work." And that man that has been introduced to you in 1901 as your "*Master*." (Applause and a voice, "That's all right.") Now, I want to ask Pirie MacDonald if he still thinks I am a gigantic ass?" [Laughter and applause.] "Does he still think I am crazy?"

Mr. MacDonald here came forward, facing the audience.

Mr. MacDonald: Beyond any kind of question, gentlemen, I can prove the proposition that Mr. Todd has been talking of. The pictures of Mr. Hollinger I will grant, with as much enthusiasm and as much frankness as I have in me, and as much honesty as any of you dare, that I did not know the pictures—that I did not understand those pictures. At that time I was working on lines that were leading directly to them. I was working on lines that had been laid down to me by old man Inglis twenty years ago, and which were working toward what Hollinger got in a jump; but as to appreciating Mr. Todd's feeling, I grant you that I did not. On the other hand, that Mr. Todd is crazy is a foregone conclusion.

Mr. Todd: That Detroit Convention has always been to me a turning point. In St. Louis you had the last of the red-hot-time conventions. They will go there again. I wanted to see higher ideas in the heads of all the photographers of this country; and in Detroit the convention got on an even keel, and when you went to Celoron you went away in the different direction. The conventions up to 1895 must have always left a nasty taste in your mouths. I do not think you have one regret in connection with any of the conventions after 1895. You have become more and more enthusiastic every year. You are having mental pleasure instead of questionable physical pleasure.

Now, in my struggles to interest a very large number of photographers on the pictorial side of their art I was invariably met with one answer: "If my subjects were only better I could make better work;" and I tried to convince them that the man behind the camera was far more important than the subject in front of it; but while this was self-evident to me it required proof to the photographer. So for years back I have followed the carrying out of the idea that you find illustrated in this pamphlet which has been distributed here, containing half-tone reproductions of twelve portraits of myself by as many different photographers. We frequently have an idea in our heads that we defer the execution of for a long time; but this year I happened to talk to two or three of my friends, and I mentioned this idea. One of them said: "For heaven's sake, go do it!" I went right ahead, and in ten days all the pictures that you see here were made. I was just starting on a trip; was to call at Rochester, Boston, New York and Philadelphia, and then back to Chicago. I wore the same suit of clothes, the same tie, everything the same, so that the subject would not be different in any way; and I called upon each of these gentlemen in turn and explained the notion that I had in my head. I explained to them that I would pose as a customer wishing some pictures made, but hadn't the ghost of an idea what I wanted; so I put myself unreservedly into the hands of the photographer, and whatever he made of me I would accept as just right.

I expected that I would find great variety in the work, but the actual results far surpassed anything I ever dreamed of; and as the pictures came along to my office I sat and looked over them again, again and again,

wondering why there should be such a difference. At last I began to see in them something I never dreamed of. I began to see in them, not so much the man Todd as I knew him—and I frankly confess I do not know him—but I began to see in them the photographer that made the picture—the individuality of the man behind the gun. The more I look over them the more convinced I am that there is nine-tenths photographer there and one-tenth Todd.

Take the very first one. You all know Mr. Appleton; what a genial, pleasant gentleman; a man of tact and expression: a man that is a good listener and good thinker—and there he is in my picture!

The next one—Mr. Hoyt. Mr. Hoyt views life too seriously. He is a man who is terribly in earnest. He means to be one of the finest photographers to be found on this continent, and conscientiously he is studying light, posing, composition, the details of his work; but he is so wrapped up in it that he forgets sometimes, I suspect, the little nothings, the small things of life, the oil that makes things go smoothly between man and man. When I sat in his chair I felt that he was too intent upon the mechanical side of his work to think of the man that was before him. So you will observe that I am very serious in that portrait. I could just fancy that if I had lived about three hundred years ago I would have been fighting at the head of the Covenanters at the battle of Drumclog.

Contrast Mr. Hoyt with Charley Hearn, who is always in the best of good humor. He has any quantity of small chaff, nothing very serious, that makes a man feel good. While there before his camera he kept rattling away, not saying anything very much, but it was pleasant and agreeable to listen to, and I felt very much like him. Look at his face as indicated in my picture.

Mock, of Rochester. I have always looked upon as being a good business man first of all. He would almost do for a Scotchman, although he is a German. He knows a dollar when he sees it, and he knows how to keep hold of it, I think. I hope you will observe, gentlemen, I am here a good German banker. I think I could get a position as president of a bank on that photograph. (Laughter.)

Mr. Hollinger: I doubt that very much.

Mr. Todd: When I dropped in to see Will Armstrong. I said to him, "Well, how are you?" He said: "Todd, I am not feeling well." (Laughter and interruption from Mr. Hollinger, "That is all right!") "I have had one of my old attacks of the ailment that bothers me a great deal, and I am just getting over it." And I think that Todd here has the same trouble! (Laughter.)

Mr. Cramer: I think that spoils all your chances to get that position as a banker. You look as if you had not washed your face for a whole year.

Mr. Todd: A man who is economical with water may be economical over money.

Hollinger is a man you all know; he is a man, who, when you get him on the platform, is a bundle of nerves. (A voice, "He's all right.") Of course, he is; but Hollinger, seated in a chair, is calm, cool, collected; a man with a lot of reserve power in him who can survey all that is going on. He is not worrying any—and in his picture of me neither am I. I am as happy and as cheerful as can be.

Clayton Harris I met for the first time, and Clayton Harris impressed me as a man who knew that he knew a great deal; was thoroughly satisfied that he knew all about pictorial photography, and did not need to study very much more. So you will observe Todd as one of the most self-satisfied men in the world! (Laughter.)

Longdon, in Chicago, is a man I know very well. When I sat down before Longdon's lens, Longdon had an idea that I was a man who went about telling stories and having a whole lot of fun, and he tried to get that. When he developed his negative, he said, "That, Todd, is a caricature." I said, "You are, perhaps, barking up the wrong tree." I was making no suggestions. So Longdon got me in the chair again, and, having been disappointed in the line that he was trying to follow out, he was at a loss. He had nothing definite for which he was searching; and so in the picture I think I am pretty well puzzled, and in that I represent Longdon.

Allen Cook is one of the young men of Philadelphia of whom you will hear a great deal by and by. Allen Cook, while I was sitting in his chair, was a little bit puzzled as to what to make of me. He walked up and down, pulled his moustache, raised the background, adjusted the various articles around the back, and looked at me again for ten or fifteen minutes. I seemed to be to him one of the biggest puzzles he had ever met—and I think I am in very much the same condition of mind in this picture as Allen Cook was, wondering what he was trying to be at as much as he.

Until I went into the studio of Pirie MacDonald I had left myself entirely in the hands of photographers; I said nothing beyond the common place; but MacDonald and I up from 1895 to the present moment have never met but we have had a scrap of some sort or another. I cannot account for it. I blame MacDonald. The chances are he blames me, but the fact remains that we are two Kilkenny cats whenever we come together. Whenever we get together at close quarters the fur commences to fly. So when I sat down in the chair it went over me: I wonder what Mac wants to do with me. So I turned around and said, "Mac, what are you going to make of me?" Mac drew back, gave a good, hearty laugh, and he says: "You and I never meet but we have a fight, whether in contest or on the Convention floor; so you might suppose my conception of you would be what I believe is the conception of every photographer in this country—that you are a fighter; fighting every chance you get; but, my boy, you are not that to me. I can see under that skin of yours. To me you are Todd the dreamer, and it is Todd the dreamer I am going to get—and I think he did. (Applause.)

It came to me with a new revelation that a man could start off with a conception of the predominant nature in a man, work for it, get it. You may differ, every one of you, as to whether that is a good picture of me, gentlemen, but you cannot deny that MacDonald worked for a certain something, and got it. Therefore, I call him a great photographer. (Applause.)

Mr. Armstrong: "Best picture in the book."

Mr. Todd: Dyer, of Chicago, is a man that I know well. We live a few miles from each other, and frequently go home on the train together. Whenever I have a new notion buzzing in my head, Dyer is the very first man to know it. So he knows me well. After my experience with MacDonald I sat down in Dyer's chair and said, "Well, Dyer, have you any notion in your head you want to get?" He said: "Yes, I am going to work to show that you are a man of high mentality. You have got high mentality. You have got clear mental insight, but there is a good deal of the dreamer in you." The reproduction here does not convey what is in the original print. It is a Sepia; they are hard to get the tone full, and the fine gradations on which very much of the effect of this picture depends. I would ask every one of you to go up to see the original hanging in the room above, and I think you will find that Dyer's photograph contains all that he worked for, whether it is a good picture of me or not.

Parkinson, a man I never met until I stepped into his studio. He struck me then. I will tell you frankly, I do not understand Parkinson yet. I have not met the man often enough. I may be wrong in my conception of the man, but he struck me as being a bluff, genial fellow, of good artistic taste, but possibly has not learned the rules of the game; working for effects and striving to gain them, but a little self-conscious that he does not get what he wants sometimes. I feel that that mental attitude of Parkinson is evident in the picture of me. If you observe, there I have that self-conscious look. I am just watching every one of you. I am bluff, I am genial, but I have got my weather eye open that you cannot overreach me.

Gentlemen, the picture poses are vastly different from what they were in Detroit in 1895. *You* have come a long way, but there is a long trip ahead of you yet. Such pictures as are displayed on the walls in this Convention, and such conceptions of the possibilities of photographic portraiture as are evidenced by MacDonald and Dyer—their conception of getting the keynote of a man's character—points out to me that there is a brighter, a grander day pending for professional portrait photography in this country. No longer are the people to buy certain pictures because they are clear or a high-finished class of work. No longer are they to be offered egg-shell finished pictures, or dull surface pictures, or expensive mounts; but you are starting in on the line of asking good prices for your work because it is pictorial. You have decoyed your customers into bad habits, and you are paying the price deservedly. Now you have got to educate them on good lines. You have got to teach them the true principles of art just as fast as you learn them.

Did you ever realize what a tyrant the eye is? Did you ever think that nine-tenths of your expenses are incurred to satisfy this organ of vision? You cannot eat off of plain, ordinary everyday plank, but you want a highly polished table, fine linen table cloths, cut glass, silver-plated forks and knives, etc. What is the necessity for all these? It is to satisfy your eye; and so

if you want your customers to pay high prices you must educate their eye that they will not be satisfied with a fine glossy finish, or a dull finish, or a fine mount that you put on the picture, but that they will look for the pictorial principle.

And here just a word about pictorial principle. Look at Dyer's picture. The area of this space is broken up into three minor spaces of head, body and background. Each of these is very different in shape from the other two, and each one of them is pleasing in itself. Dyer is a man with a very excellent conception of spacing.

Look at Appleton's. He divides his into four spaces. They are very pleasing, but the outline made by the head and my coat is not to me so satisfactory as the outline you find in Dyer's picture. It is stiffer. Follow the pictures through. Hoyt has no conception of spacing. Hearn has no conception of spacing. Is too symmetrical. Mock has no conception of spacing. Armstrong feels a little bit that way, but he has not got it. Hollinger has good conception of spacing. Harris, good conception of spacing—a little dark. Longdon, one good flowing line, but it is too symmetrical—too uniform. Cook, I like his work, but the spaces to me are stiff and formal. The outline of the body is not pleasing at all. MacDonald, no conception of spacing at all.

Gentlemen, it is up to you to take up a new lesson.

At the close of Mr. Todd's address he placed the name on the bulletin board and recommended the purchase of a text-book called *Composition*, by Dow, published by the Baker & Taylor Co., 17 East 33d St., New York City, price $1.50, stating that it was worth $50 to any member of the association.

Mr. Hollinger: I want to second that, because I have looked through and read it carefully, and I know it is worth any one's attention.

The tellers now announced the result of the election as follows: Total vote cast, 172; necessary to choice, 87. Of these Mr. Schumacher received 30; Mr. Klein 41; Mr. Nussbaumer 101. (Applause.)

President Core: Mr. J. George Nussbaumer has received a majority vote and is duly elected as First Vice-President for the coming year. (Speech! Speech!).

Mr. Nussbaumer: Ladies and gentlemen, the time is very limited. I simply want to thank you for your approval of the work that I have done in the past. I will try to do the very best that I can in every way for the convention. Thanking you for the honor, I accept. (Applause.)

Mr. MacDonald: I am instructed by Mr. Armstrong to withdraw his name from nomination in favor of Mr. Henry S. Klein. Mr. Armstrong has instructed me to do this, feeling the injustice of his taking a position which belongs to another man. He feels the injustice of springing from the floor into the Executive Board and usurping the place of a man who is more competent to fill the position than probably any man in the Association. (Applause.) He feels the utter injustice of throwing a man out of office, because he knows, as we all know, that it is impossible to get faithful men to serve you if, after you have used them, like a squeezed orange, you throw them away. We feel that we have more in store for our friend Mr. Klein, and, gentlemen, I want you to give a cheer for Armstrong, a man with real generosity. Hip, hip, hurrah! (Cheers were given, after which Mr. MacDonald continued:)

Gentlemen, I believe it is in order to make a motion to accept the declination of Mr. Armstrong, and I so move. Carried.

Mr. MacDonald: I will now place in nomination the name of Mr. Henry Klein for Second Vice-President.

Upon motion of Mr. Giffin the nomination closed.

On motion of Mr. R. P. Bellsmith the Secretary was instructed to cast the ballot of the convention for the election of Henry S. Klein, of Milwaukee, as Second Vice-President for the ensuing year. The Secretary having done so the result was duly announced.

The President announced as next in order the election of Secretary, and stated the name of the regular nominee, Mr. C. R. Reeves, of Anderson, Ind.

On motion the nomination closed and the Secretary was instructed to cast the ballot of the convention for the election of Mr. C. R. Reeves as Secretary for the ensuing year.

The Secretary having so done the result was duly announced.

Mr. R. P. Bellsmith: We owe a debt of thanks to the people of Detroit who made it possible for us to come here, and who have given us such a good time, a boat ride, etc. I therefore move that a vote of thanks by this convention be tendered to the Detroit Chamber of Commerce and to the Merchants' and Manufacturers' Exchange, and that we invite them to visit us here to view the pictures in this convention.

The motion was seconded by Mr. Van Norman.

Mr. Morris suggested as an amendment that the President appoint a committee on resolutions; the motion not being seconded,

the President stated that that matter would be covered later, and the question of the original motion was now put to vote and unanimously adopted.

On motion adjourned until 10 A.M. on Friday, August 9th.

FOURTH DAY—MORNING SESSION.

The Convention met pursuant to adjournment, President Core in the chair.

President Core: The first item in order on the programme this morning is unfinished business. That, I believe, includes the appointment of the World's Fair Committee. You will remember that a committee of three was to be appointed to draft resolutions with regard to the building to be erected in St. Louis in 1903. I will appoint Mr. J. C. Strauss, St. Louis; S. L. Stein, Milwaukee, and C. M. Hayes, Detroit, as such World's Fair Committee. (Applause.)

Next in order will be the reading of communications.

The Secretary read the following:

COLUMBIA UNIVERSITY, N. Y.,
July 25, 1901.

MR. E. B. CORE, New York City.

MY DEAR MR. CORE: I have packed and arranged to ship by express the box according to your directions, on August 1st. You will find enclosed in an envelope some small labels, which you may place on the daguerreotype apparatus. I should like, if possible, to have the labels returned, as they belong to our Museum collection.

Hoping that the apparatus may prove to be of some attraction at your exhibition, and that the whole exhibition may prove a success, I am,

Very sincerely yours,
L. H. LAUDY.

P. S. I have included a few daguerreotypes and also a few of the cases, giving you an idea of the state of the art in the early fifties.

DETROIT, MICH., Aug. 8, 1901.

MR. J. GEO. NUSSBAUMER,
Secretary P. A. of A.

DEAR SIR: The New Windsor Jockey Club wishes to extend courtesy to the members of your Association and their ladies for to-morrow afternoon. The racing begins at 2.30 in the afternoon, Detroit time, and the badge of your Association will be honored at the gate.

We will be pleased to see you over there, and think it will help to make your stay in Detroit pleasant.

Respectfully yours,
L. C. WISWELL, Secretary.

On motion the communications were received and filed, with thanks.

President Core: This is the closing day of the Convention, and as the Chair would like all the support he can have up to the last hour I would ask that all ex-presidents in the audience take seats upon the platform. It will add to the dignity of the occasion, and you know the invitation is heartfelt. (Applause.)

In response to this invitation ex-Presidents Ryder, Cramer, and Bellsmith came forward and were seated upon the platform.

President Core: The press and the people of Detroit have been very, very kind to us, and it seems to me that it would be fitting to return an acknowledgment of this kindness in a suitable manner. To that end resolutions embodying our appreciation ought to be prepared, and I will entertain a motion that a committee for that purpose be appointed.

On motion of Mr. Nussbaumer the Chair appointed a committee of three on resolutions, viz.: Messrs. W. I Scandlin, New York; Geo. B. Sperry, Toledo; Geo. W. Gilson, Buffalo.

The committee thereupon retired and later made report, which was unanimously adopted, as follows:

*Report of Committee on Resolutions.*

MR. PRESIDENT AND LADIES AND GENTLEMEN: Your committee have duly considered the matter entrusted to them, and beg leave to report as follows:

*Whereas*, The Photographers' Association of America, in twenty-first annual Convention assembled, highly appreciating the many courtesies received during Convention week, do hereby

*Resolve*, That the hearty thanks of the Association be and hereby are extended to his Honor the Mayor, the citizens of Detroit, the press, and to all others who contributed to our enjoyment; also to those gentlemen who favored the Convention with prepared papers or addresses.

Respectfully submitted,
W. I. SCANDLIN, Chairman,
GEO. B. SPERRY,
GEO. W. GILSON,
Committee.

Secretary Nussbaumer: Inasmuch as Mr. Milton B. Punnett was forced to go home by press of business, and in the rush yesterday was unable to give us his instructive lecture, I move that his address be em-

bodied in our report the same as though it were read.

Carried.

## ADDRESS OF MILTON B. PUNNETT,

## *Practical Chemistry for Professional Photographers.*

LADIES AND GENTLEMEN: A calm consideration of the extent of the subject upon which I was to address you showed me the absurdity of trying to produce within the space of one brief address anything which would do justice to the subject and yet prove acceptable. I have, therefore, tried to produce something somewhat along the original lines intended, but which, I hope and think, will be more instructive and interesting.

### *The Plate.*

The photographer may justly consider the dry plates as the beginning of all photo-chemical manipulations. The dry plate of to-day is glass, which is a transparent chemically inert substance coated with a film of gelatine containing varying proportions of silver bromide and silver iodide. The silver bromide may be considered the chief constituent. The gelatine, which is a species of refined glue, beside its binding qualities also acts as a sensitizer in furthering the action of the light.

Very often one will hear the remark made that this or that plate is rich or poor in silver, and I would like to remark here that within workable limits it is impossible to say as to the amount of silver salts in a plate without making a chemical analysis.

The density of an image obtainable on a plate is no proof of the amount of silver a plate contains, for on a plate containing twice as much silver as another it may be possible to obtain an image of only one-half the strength. The difference is attributable to a difference in the molecular condition of the silver salts in the plate.

The action of light on a dry plate is a much disputed point among chemists. Some claim that it causes the oxygen, which is always present, to unite with the silver salts. Others claim that it causes a partial decomposition of the silver salts, the released bromine uniting with the gelatine, leaving a silver sub bromide which contains half as much bromine as the original silver bromide.

The action of the developer may be considered as a continuation of the light action resulting in a reduction of the silver salts, affected by the light, to metallic silver or compounds of silver, the released bromine going into the developer.

### *Inertia of a Plate.*

The subject of the effect of light on a plate brings one to the consideration of a property of a plate not generally recognized by the present-day photographers, but well known to the old wet plate-workers. I refer to what is sometimes called the "inertia of a plate." The term refers to the amount of light to which a normal dry plate can be exposed before a developable impression is made. As an example: if it requires the expenditure of 101 pounds of force to move a stone and 100 pounds is applied, no visible effect is produced, but the moment the extra one pound is applied the stone would be moved. I had a practical illustration of this phenomenon in some trouble a photographer was experiencing.

The trouble consisted in the appearance of a comet-shaped marking, lighter than the surrounding image, on some of his negatives. The head of the comet was about the size of the top of my little finger, otherwise the negatives were good and practically free from fog. Investigation showed that it was caused by the light passing through the plate and being reflected back from the shiny black surface of the inside back of the plate-holder. Where the spring of the plate-holder rested against the plate the latter was protected from the effects of surrounding parts, hence that part was not so dense.

Many of the old wet-plate workers, when they wished to increase the speed of their plate, would give them a quick exposure to light, thus bringing them into a condition where a much shorter exposure was necessary to produce an image.

### *Reversal of the Image.*

There is another property of the action of light on a dry plate which, at first glance, might be pronounced detrimental, but which, in reality, in many cases, is very beneficial. I refer to what is termed "Reversal of the Image." As you all know, if a plate is exposed beyond a certain length of time, a time which varies with different plates and different conditions, the image, instead of becoming denser in the high lights, begins to grow thinner. Reversal of the image is beneficial in that it gives us a means of equalizing the immense difference which generally exists between the intensities of the light in the high lights and shadows of a picture. The rule, "Expose for the shadows, and let the high lights take care of themselves" is founded on this property.

If the opacities of a negative were proportioned to the amount of light which caused them, there would be such a difference between the strengths of the high lights and shadows, it would be impossible to reproduce them on any of the printing mediums in present use.

### *Development.*

A developing solution ready to use contains chemicals which can be classified under three headings, viz.: Reducers, Preservatives, and Accelerators.

*A Reducer* may be considered as an element or substance which acting on a compound substance will abstract from the compound substance part or all of a certain element or elements in the combination, leaving a substance containing less of the element or elements abstracted, or leaving a simple element. This definition would not pass muster in a text-book of chemistry, but it will answer our purpose.

*Experiment.* I have here a solution of mercuric bichloride, sometimes used in intensifying a negative. When I introduce this cleaned copper cent the mercury is reduced and deposited on the cent, and an equivalent amount of copper has gone into the solution as copper chloride. In this case the copper was the reducing agent

*A Preservative* is something that protects the reducing agent from what may be termed outside influence, allowing it to expend itself in the proper direction.

*An Accelerator* is something that aids the reducing agent in performing its work. It is characteristic of the reducing agents used in photography that they have a great tendency to unite with oxygen. You are all acquainted with the fact that pyro, metol and similar compounds soon darken and become useless if in a solution without a preservative. Preservatives have also either an affinity for oxygen, or else they protect the reducing agent by lessening its affinity for oxygen. Sodium sulphite is an example of the first class and oxalic acid of the second class.

It is a characteristic of all accelerators used in connection with organic reducers that they have an alkaline reaction.

Of late years the number of organic reducing agents has so multiplied that a discussion of them and their relation to each other would be beyond the limits of this address.

Regarding the action and value of the many reducing agents, I was much struck by the remarks of Mr. Alfred Watkins on the subject in *The Photo-Beacon.*

Mr. Watkins, who is without doubt the best informed man of the present day on this subject, says: "In a paper read before the Royal Photographic Society I described a comparison of seven developers, namely: pyro, metol, ortol, adurol, hydroquinone, kachin and glycin. All were made up with the same formula (no bromide) and compared under the same circumstances. The result may be summed up:

"Effect on speed of plate, very slight and doubtful difference.

"Searching out detail, no difference.

"Ultimate density power, no difference.

"Appearance of image, wide difference.

"Speed of working, wide difference.

"There is one respect in which developers differ. One class of developers (represented by metol, rodinal and weak pyro) causes all the tones to appear very early in the course of development, and density seems to follow with comparative slowness. This class has the reputation of giving thin negatives because users are deceived by the rapid appearance of image and take the plate out too soon. In the second class of developers (represented by hydroquinone, quinol, strong pyro, and adurol) the lowest tones or detail appear slowly, and by the time they are put out the high lights have attained

quite a respectable amount of density, and density is afterward attained quite rapidly. The usual tendency with these developers is to over develop, and thus get too much contrast.

"It really does not matter which developer you use if you take the plate out of it at the right stage of contrast; for all (variations in bromide excepted) give identical negatives if their action is stopped at the right moment. For general purposes it is more convenient to use a developer which is neither in the first class or the second, but intermediate, density following the appearance of the image at a comfortable rate It is a peculiarity of pyro that it belongs to the first not the second class according to the grains of pyro to the ounce of developer."

This last remark of Mr. Watkins goes far toward explaining the popularity of pyro.

Considerable of what Mr. Watkins says will be considered by photograpers as rank heresy; especially will this view be taken by the man with the pet developer. As the result of many sensitometer tests made with various developing agents for which great things were claimed, I can confirm many of his statements.

I have no intention of speaking disparagingly of the newer developing compounds, for while they do not possess any advantages over pyro in the negative produced, they have helped wonderfully in the advancement of photography in other directions. I refer especially to their use in the development of lantern slides, bromide and chloride papers.

Chloride developing papers, or as they are generally called, gaslight or daylight developing papers, are like the printing-out chloride gelatine and collodion papers, so much used at present, by no means a new discovery, but owe their general adoption to improvements made along other lines. Collodio-chloride papers were made about thirty-five years ago and gelatine chloride printing-out and developing papers about twenty years ago.

*Preservatives.*

Of the known preservatives neutral sodium sulphite is the one most commonly used, and to it has been attributed many evils, some real and some imaginary.

To start with, there is prevalent among photographers a misunderstanding of the meaning of the term neutral used in this connection, and this misunderstanding has been the cause of the condemnation of many really good brands. The term neutral used here does not refer to its reaction, or rather non-reaction, with indicators such as, for instance "litmus," but refers to the chemical solution of the salt.

Sulphurous acid has two atoms of hydrogen which can be replaced by an equivalent base or metal. If we replace one of these atoms of hydrogen by an equivalent amount of the metal sodium we have acid sodium sulphite.

| Sulphurous Acid. | | Caustic Acid. | | Acid Sodium Sulphite. | | Water. |
|---|---|---|---|---|---|---|
| $H_2SO_3$ | + | NaOH | = | $NaHSO_3$ | + | $H_2O$ |

Acid sodium sulphite, or as it is commonly called, sodium bisulphite, reacts acid with litmus paper, but is called acid because it has still left an atom of hydrogen which can be replaced.

If we replace both atoms of sulphurous acid with sodium we have neutral sodium sulphite.

| Sulphurous Acid. | | Caustic Acid. | | Neutral Sodium Sulphite. | | Water. |
|---|---|---|---|---|---|---|
| $H_2SO_3$ | + | 2 NaOH | = | $Na_2SO_3$ | + | 2 $H_2O$ |

Neutral sodium sulphite reacts alkaline to litmus paper, and is called neutral because the two replaceable atoms of hydrogen in the acid have been replaced by an equivalent amount of metal; that is, its affinity is neutralized or satisfied.

A similar relationship exists between carbonic acid and sodium bicarbonate and carbonate. In this case the bicarbonate (also called acid carbonate and baking soda) reacts alkaline, and the carbonate (also called neutral carbonate, sal soda and washing soda) is strongly alkaline, as you all know. It is impossible to make neutral sodium sulphite acid, for if it is crystallized from a solution made strongly acid with sulphurous acid the pure crystals react alkaline.

From these examples the inference must not be drawn that all chemically neutral salts react alkaline; on the contrary, there are some that test neutral and others that test acid.

The reason assigned for the fact that sodium sulphite and sodium carbonate are alkaline is that the alkalinity of the sodium or basic part of the compound is so much more powerful than the acid part that its characteristic properties predominate. Sulphurous and carbonic acids are comparatively weak acids as far as their ability to affect litmus and other indicators and to be replaced with other acids is concerned. If common vinegar, whose sour taste is due to the acetic acid it contains, is added to a solution of sodium sulphite or sodium carbonate, the sulphurous acid or carbonic acid, as the case may be, is driven off and its place taken by the acetic acid, sodium acetate being formed.

Acetic acid is not considered a very powerful acid. As examples of strong acids we may mention sulphuric, nitric and hydrochloric acids. Another thing which has led the photographer astray regarding the quality of his sulphite is the fact that litmus is not a very good indicator for sulphurous acid. Litmus is of a vegetable origin, and sulphurous acid has a bleaching action on vegetable colors. Many of you are acquainted with the interesting experiment of bleaching a flower by holding it in the fumes from a burning sulphur match.

Again, if in neutralizing the sodium sulphite solution the acid is dropped on the surface of the solution each drop causes a slight effervescence showing the escape of the sulphurous acid gas. To avoid this, stir the solution while adding the acid, or better still, drop the acid into a separate empty vessel and pour the solution in on top of it.

Theoretically the best acid to use in acidifying a sodium sulphite solution would be sulphurous acid (not sulphu*ric* acid), but it has the drawback of not keeping well in solution, beside not being always obtainable. When the fumes from burning sulphur pass into water they are absorbed, forming a sulphurous acid solution. Sodium sulphite is made by passing sulphurous acid gas through sodium carbonate and then evaporating until crystallization takes place. If care is not taken to convert all of the carbonate into sulphite before evaporating, it can easily be seen how the latter salt may exist as an impurity in the former. The natural alkalinity of sodium sulphite would make it difficult for the general photographer to say whether sodium carbonate was present or not unless the latter salt was present in fairly large quantities. A well-known photographic chemist informed me that he had analyzed a sample of sodium sulphite which contained 18 per cent. of carbonate. Of course, such a large amount of carbonate would cause irregularities in development, unless its presence was known and allowance made for it in compounding the developer.

Crystallized sodium sulphite upon exposure to dry air gradually loses its water of crystallization and changes to the powdery form. Under similar conditions it is oxidized to the sulphate. It does not necessarily follow that these two changes go hand-in-hand and that all the white powder is sulphate. The crystallized article should always be kept in a cool dry place in well sealed bottles or cans.

In buying sodium sulphite as well as other chemicals used in photography it is best to obtain a reliable article from a reliable dealer.

Dry or anhydrous sodium sulphite is now easily procured and presents some advantages over the crystallized article.

Sodium bisulphite and potassium metabisulphite are two preservatives which are not so universally used as the neutral sulphite, and when used it is generally in connection with the latter salt. Their strength if anything is more uncertain than that of the sulphite.

The amount of sulphite in the developer affects the color of the negative image by regulating the rate of decomposition of the pyro. The less sulphite the faster your pyro oxidizes during development, and therefore the more your film and image will be stained. The image does not consist entirely of silver, but is partially made up of an organic deposit from the decomposed pyro.

*Acid Pyro Preservatives.*

As a preservative of the pyro stock solution before development various acids have been recommended. Tests made of oxalic, citric, tartaric, and nitric acids for this purpose showed the first named to be the most suitable, especially when distilled water is used. If hard water is used the lime combines with the acid forming

PORTRAIT

By Louis F. Jansen, Buffalo, N. Y.

the insoluble calcium oxalate (commonly called oxalate of lime) and an uncertainty as to the amount of acid remaining is introduced. When making the acid pyro solution the acid is dissolved in the water before dissolving the pyro.

As the preservative power of the acid ceases as soon as the pyro solution is mixed with the carbonate solution, it is necessary to add the usual amount of sulphite to the carbonate solution. The poisonous property of oxalic acid need not be considered as preventing its use, as pyro itself is just as poisonous.

*Accelerators.*

The alkalies commonly used in developers fall under two headings, viz., hydrates and carbonates. These headings, of course, take no account of sodium triphosphate and acetone sulphite, which are sometimes used. The latter two compounds deserve, as far as my experience with them leads me to judge, but a passing notice. Sodium triphosphate, upon exposure, is easily changed by the carbonic acid in the air into the common sodium phosphate and sodium carbonate. There is, therefore, a doubt as to its purity. In the developer it has no advantages over the alkalies generally used.

If lime or limestone is dissolved in acetic acid, acetate of lime, or, in chemical nomenclature, calcium acetate is formed. If calcium acetate is subjected to sufficient heat it is decomposed, and one of the products formed is acetone. Acetone, when pure, has an agreeable odor, but the odor of the common article is far from being agreeable. It has been recommended in combination with sodium sulphite as an accelerator. An extended series of sensitometer tests showed that it had no advantages over the ordinary accelerators in the production of either speed or density, but has the disadvantages of smelling badly, and its comparatively high cost.

*Hydrates.*

The hydrates of sodium, potassium and ammonium are better known to the photographer as caustic soda, caustic potash, and ammonia or water ammonia.

With the exception of ammonia hydrate, they have never come into common use. They are much more energetic than the carbonates, but do not direct their energy solely along the line of development, but attack the film and dissolve the cuticle of the fingers, causing that slippery feeling. This is especially true of caustic soda and caustic potash.

These latter salts have a somewhat extended use in this country and in England in connection with ammonia carbonate as an accelerator in developers used in producing colored lantern slides and transparencies. In this class of developers they react on the ammonia carbonate, forming sodium or potassium carbonate, as the case may be, and ammonium hydrate or free ammonia, and it is the free ammonia which is most active in producing the colored silver deposit.

*Ammonia hydrate's* day has gone by in this country, although it is still used quite extensively in England. Its strength is very uncertain, varying from the stronger water ammonia of the chemist to the weak, watery solution sold for a few cents at the corner grocery.

The uncertainty of its strength, its volatility before and during development, and the disagreeable effects its fumes have on some people, are the chief reasons for its being discarded.

*Carbonates.*

There are but two carbonates that are used to any extent, and there should be but one, and that one is sodium carbonate.

I know in making this remark that many of those present will not agree with me, but this assertion is not made off-handed. It is the result of many practical comparative tests—not tests made by exposing some plates to-day and developing with potassium carbonate; and exposing some to-morrow under perhaps different conditions, and developing with sodium carbonate, then claiming that because the latter were the better it was due to sodium carbonate used; but by making comparative tests side by side under as near identical conditions as possible. As far as relates to the product of speed, density and chemical quality, potassium carbonate is just as good as sodium carbonate, and no better. Sodium carbonate has the advantage of being more easily obtained, of a definite strength, purer quality and cheaper price. Potassium carbonate (sometimes called salts of tartar) is deliquescent—that is, it absorbs water from the air, and becomes semi-liquid. Crystallized sodium carbonate under ordinary conditions of atmosphere effloresces or loses part of its water crystallization. Chemically the carbonates undergo no change during exposure to the atmosphere.

*Action of Accelerators During Development.*

It has often been stated that the action of the accelerator in the developer is to open the pores of the gelatine, thus allowing the reducing agent to act on the silver salts. There may be a grain of truth in this statement, but it is only a grain. Acetic acid has a powerful softening and solvent action on gelatine; yet a developer containing free acetic acid in place of alkali would hardly prove a good one.

The truth is, that all organic reducing agents used in development have a greater affinity for oxygen when in an alkaline solution than when in an acid solution, and, therefore, act more energetically in the former condition.

As an illustration, the method of determining the amount of oxygen in the air may be mentioned. Here a measured volume of air is passed into a pyro solution made strongly alkaline with caustic soda. It is then passed back into the measuring tube, and the loss in volume shows the amount of oxygen absorbed by the pyro.

*Fixing Baths.*

Sodium hyposulphite, or, more correctly, sodium thiosulphate, is now obtained of such good quality that it is seldom that any fault can be found with it. The relationship existing between sodium sulphate and sodium thiosulphate is easily seen from a comparison of their chemical symbols.

| Sodium Sulphate. | Sodium Thiosulphate. |
|---|---|
| $Na_2SO_4$ | $Na_2S_2O_3$ |

One atom of oxygen in the former is replaced by an atom of sulphur in the latter; hence the prefix *thio*, referring to the sulphur.

When an acid or an acid reacting salt—for instance, alum—is added to a hypo solution, this sulphur becomes visible as a fine white precipitate.

The name sodium hyposulphite originated from the relationship which it also bears to sodium sulphite. This relationship is easily seen when its method of manufacture is considered. If a solution of sodium sulphite is heated with an excess of sulphur the following reaction takes place:

| Sodium Sulphite. | | Sulphur. | | Sodium Thiosulphate (Hypo). |
|---|---|---|---|---|
| $Na_2SO_3$ | + | S | = | $N_2S_2O_3$ |

That is, one molecule of sodium sulphite plus one atom of sulphur equals one molecule of sodium thiosulphate.

The above method, of course, is not the method used in manufacturing the commercial hypo, for, as the crystallized hypo contains more sulphur and only one-half the amount of water of crystallization that the crystallized neutral sulphite contains, it is easily seen that if the former were made from the latter it would necessarily cost more. Hypo is cheap because it is made from the by-products found in the manufacture of sodium carbonate.

When a plate is placed in the fixing bath the sodium thiosulphate reacts with the silver bromide and iodide, forming sodium silver thiosulphate and sodium bromide and iodide. These salts all being soluble in water are removed by washing. I do not intend to enter into a discussion of the various kinds of fixing baths, but will say that in my experience the acid alum fixing bath made with common alum, acetic acid, sodium sulphite and sodium thiosulphate is the best all-round bath. The sulphite is added to prevent the acid and alum from acting on the thiosulphate and precipitating the sulphur.

*Temperatures.*

One word regarding temperatures. It is not sufficient in summer to have your developer at a proper temperature, but if possible trays, fixing bath, and wash water should be cooled; otherwise the cooling of your developer is but a partial protection from the common summer complaints.

*Analyses.*

It is hardly within the scope of this address to deal with the qualitative analyses of chemicals, but there are a few points which occurred to me, and which, I think, will be of interest and aid to you.

Suppose you had made up three solutions, viz., a carbonate, a sulphite, and a hypo solution. Having omitted

to label them (something you should never do), you found some time afterward you did not know which was which. Most of you would do as our President, Mr. Core, said he would do, viz.: "Dump them out and start over." But why waste time and chemicals when they can be very easily saved?

I have before me three solutions like those I have mentioned. To one I add an acid, in this case acetic acid—most any other acid would do—and it effervesces strongly; of course, that is carbonate. To the second I add the acid. It effervesces slightly, but smells strongly like burning sulphur; you all know that is the sulphite. The remaining solution must necessarily be the hypo, but we can easily test it by adding the acid. It turns milky, due to the sulphur precipitating out, and sulphurous acid gas like that from the sulphite escapes. If to the hypo solution we added a solution of alum the same reaction would have taken place, as you all know from experience in compounding an alum hypo bath without adding sodium sulphite.

President Core: There is another matter that you must not pass by, and that is a vote of thanks to our local committee, who have certainly displayed the greatest energy in furthering the interests of this convention and in administering to our comfort and pleasure. I will entertain a motion that the thanks of this Association be extended to the local committee for their work.

Mr. H. L. Klein: I move you, sir, that we draft resolutions thanking the local committee for their efficient work in entertaining the P. A. of A. I do not believe we were ever better entertained than we have been on this occasion. I think that we should also thank the General Aristo Company for the entertainment of yesterday afternoon and evening, which was royal in every respect. (Applause.)

President Core: Instead of appointing a committee, if there is no objection, it is ordered that our Secretary will notify the proper parties that such vote of thanks was proposed and adopted.

Mr. Klein: I consent to that.

President Core: Last year I had the pleasure of going to Boston and attending a session of the Brush and Lens Club of that city. I can assure you I was very much edified by the manner in which they conducted their meeting and the broad-minded feeling that prevailed even while their pictures placed upon the screen were being torn literally limb from limb. I can assure you that a man who can sit in a front seat and see his picture vivisected and rise up and shake the hand that slew him is a remarkable man. It impressed me so forcibly that I thought that something introduced into our national meeting in Detroit on that line would be not only a great benefit, but would leave a lasting impression as well upon the people who heard the criticism and had no pictures exhibited as upon the man who made the pictures. Mr. Lucius W. Hitchcock has very kindly consented to take the part of critic. I do not see him present in the hall just at this minute.

A messenger was sent for Mr. Hitchcock, and in the meantime a matter came up which was not down on the programme.

Mr. R. P. Bellsmith: Mr. President, a very pleasant duty devolves upon me. A number of your friends, sir, desiring to express their kindly feeling toward you, and appreciating the success that you have made of this meeting, and the infinite patience and kindness with which you have conducted your administration, have determined to express their appreciation in a tangible form. In their behalf the duty devolves upon me of presenting to you as a token of their high regard this clock and figure. (Mr. Bellsmith here uncovered a beautiful gold bronze clock surmounted by a female figure.) In presenting this, Mr. President, the donors trust that you will never forget the good old *time* we had in Detroit. (Applause.)

President Core: There are times when one feels too little to say anything, and there are times when one feels too much. This is a time when I feel too much. I thank you. (Applause.)

Mr. G. Cramer: My dear friend, President Core, allow me to have a word edgewise on this occasion. (Grasping Mr. Core's hand heartily.) I have not had a chance to say much, and I cannot pass this opportunity. It is my sincere wish, and I know it is the wish of everybody present, that the hands upon this clock may never show an hour or a minute when you cannot say from the bottom of your heart, "I am so happy!"

(This allusion to "Papa Cramer's" well-known motto brought down the house.)

Mr. Wilson: Mr. President, shall we take up unfinished business at this time? Is it in order to consider the copyright matter, or is any action to be taken in regard to marking the grave of Mr. Prevost, as suggested by Mr. Scandlin, of New York?

President Core: Well, nothing has been done in that matter, and its consideration

now would be rather in the nature of new business. I suppose it could be entertained, but it seems to me that perhaps that might be left, so far as the Prevost matter is concerned, to a little longer consideration. I think that when people have thought more upon the subject, perhaps they can do more with it, and it would be more generally understood. If there is a motion to that effect, however, I will ascertain the sense of the meeting. Do you wish to make a motion?

Mr. Wilson: My reason for asking about the copyright matter is, I understood this was to be taken up at this convention in some form. There are some changes which have been suggested by those who desire protection in that way, and I thought perhaps it would be advisable to take it up before the convention adjourned.

President Core: That is a matter for the association to settle. It seems to me that individual effort on the part of each one in his own Congressional district, bringing influence to bear upon his Representative, would be about as much as could be done.

Mr. Wilson: When I was in Washington they assured me in the copyright office that they would be glad to entertain any suggestions. They have recently devised a new form that is simpler than the old one, but any suggestions coming from us they would be glad to entertain. I think it would be well to have a committee to look into it and see what can be done.

President Core: The Chair will entertain a motion.

Mr. Wilson: I will make a motion that a committee of three be appointed to see what can be done in the way of throwing greater protection around copyright or anything that should be copyrighted.

The motion was seconded.

President Core: Is there any amendment to that as to when this committee shall report?

Mr. Wilson: I think it would be well to give them power to act pending the next meeting of the association.

The question being put upon the motion, the same was carried.

Mr. Wilson: I would like to make a motion that a committee be appointed to consider and decide what action would be appropriate to be taken by this Association in regard to marking the burial place of him whom we are ready to believe, and are informed, was one of the first professional photographers of this country, Mr. Prevost, and to report back at the next meeting. Carried.

Mr. G. Cramer: Our old friend, Mr. J. F. Ryder, has come here from Cleveland by special invitation from us. He is "All right" as you say. I hope that next year when we meet in Buffalo he will be all righter. (Oh!) I hear that he is writing a book entitled *My Experiences in Photography*. I for my part am very anxious to receive that book relating to fifty-two years' experience in photography. Certainly that would cover a great many interesting items that concern our craft. I hope that when that book comes out that every one of you will want one of them. I want several. I desire to move a vote of thanks to Mr. Ryder for his so promptly responding to our call. Carried, by special request of "Papa Cramer," by a rising unanimous vote.

Mr. Ryder: I thank you, gentlemen, for the kind attention shown me both in sending a telegram and in following it up by all these pleasant things. I am enjoying the meeting with you, gentlemen, with whom I have been in the habit of meeting for forty years, although I feel that I cannot talk very much, like the other gentleman here on the platform who could not say much a while ago. (Applause.)

Mr. Stein: I would like everybody to rise and give three cheers for "Papa Cramer," who has been with us many years, and we hope will be with us many more. Rise, everybody, and let us give him three good resounding cheers, hip—hip—hip—hurrah. (A voice, "He's all right," and cries of "Cramer," "Cramer," "Speech," "Speech.")

Mr. G. Cramer: I am glad that I have words to say that I rejoice that I belong to this honorable Association. What would I have made if I had not been a photographer—not knowing the best people on earth? (A voice, "That's right!") I have been always proud of that. It gives me the greatest pleasure when I travel through the United States and meet you all. As a member of this Association I have a passport which carries me into any photographic

shop or studio, no matter how small or how big it is. I always find friends everywhere. I now offer three cheers to all my friends, and may they always prosper and be "so happy." I can't say any more. I put my whole soul into that. I want you to take that word home. Friend Hollinger is "all right," and Papa Cramer is "so happy." Whenever you have an opportunity to get angry do not let that anger control you. Just think a minute and say, "I am so happy." If you keep on saying that a good many times I think you will finally convince yourself of it, by a sort of hypnotic suggestion, or Christian science, or whatever you choose to call it. (Laughter.) Be happy and let that happiness communicate itself to all your surroundings. If you will just remember that, you will take home from this convention in that alone enough to fully compensate you for your time and money. I thank you. (Applause.) (Cries of "Hitchcock," "Hitchcock.")

President Core: Before Mr. Hitchcock commences, you know we want to reserve some good things for the last. There are one or two other little things that will not take but a few minutes, and as Mr. Hitchcock is a very gracious gentleman, I know he will give way for the present. We will first hear from Mr. Todd, who has a little poem he wants to recite. I believe it is original, but I do not know.

Mr. Todd: It is original, but not by me. It happens to fit in at the present moment with some of your ideas, viz.:

I am so happy { when wrong or when right;
in darkness or light;
up hill or down;
in country or town;
on land or sea;
wherever I be;
when here, or when there;
when 'tis cloudy, or fair;
when good, or when bad;
when others are sad;
in smiles or in tears;

For I have been happy for eighty-five years.

I am so happy—this is my song,
I am so happy all my life long.
And if in the future I happen to die
And roost with the angels up in the sky,
I'll telephone down to Hades, to you,
And say, "I am so happy!
And hope you are too!"

President Core: We have another gentleman with us who has poetic leanings; and we would like to hear from Mr. Parkinson, of the Boston Brush and Lens Club.

### *Remarks by Mr. Morris B. Parkinson.*

MR. PRESIDENT, LADIES AND GENTLEMEN: In spite of considerable embarrassment, it gives me great pleasure to stand before this audience representing the National Photographers' Association of America for the first time. After hearing the speeches we have had on the subject in regard to being "So happy" and in regard to "Being pleasant" the thought comes to me that it is very easy for photographers to look pleasant to their customers who have paid them or are about to pay them large sums of money, and it is quite possible for photographers to look pleasant when meeting brother photographers of some other city or state; but it is not so easy for a photographer to look pleasant at his fellow photographer who lives in his own town. Nevertheless, that is what we are doing in Boston. From the time I went to Boston. I am happy to think that almost from that day—I do not know that it was the case before to any great extent—there has been a banner raised upon which is inscribed, not literally, but figuratively speaking, the words "Friendship and Progress among Photographers in the Same Town." (Applause.) I do not claim to have done anything to help that movement. I do claim however, that I have done nothing to hinder it; and that which a man does nothing to hinder he may certainly be considered to help. Very few hindered the P. A. of A. from going to Buffalo next year; and therefore it goes there. The photographers in Boston organized a club which they call a "Brush and Lens Club." We meet once every two weeks for the discussion of pictures. Pictures are torn to pieces without mercy, and the photographer, as your President has lately told you, sits there and looks "so happy." I believe that the spirit so pervades the city of Boston among photographers that a member of that club would let any one in the street knock him down, and would not call a policeman to have the offender arrested for assault and battery, but in deep meditation would try to think, and I believe would succeed in persuading himself, that it was done for his own good! (Laughter.) While I am on my feet I would invite your attention to our exhibit Each of our exhibits is individual and to be examined as such.

I have not said a word of what I intended to speak of, and that is to read a few lines which I wrote for the *Art Review*, of St. Louis, about six weeks ago, concluding an article on photography. These lines apply to the subject of over-retouching, especially of old people. They are as follows:

*To My Fellow Photographers.*

What love but God's can equal mother's?
The love that self forever smothers.
Can love of sisters or of brothers
And all the others?

Love seams her face with anxious lines,
Rich veins of gold, which are the mines,
The years of care are quarrying—signs
Repeated many times.

Dost see that wrinkle 'round her eyes?
A pearl of mirth that typifies
The hours of happiness, Fate denies
To few, caught from the skies?

There's beauty in the smooth and fair,
But there's a beauty still more rare—
Modelled not in a day or year—
'Tis lines of character.

Would'st thou, with vandal hand, erase
The sacred record, and encase
A tome of blanks which but deface?
The act were base.

Would'st strip the ivy-mantled tower
Of some historic ruin? More—
The pile that pilgrims all adore
Would'st thou restore?

O artist of the lens! would'st tear
These holy emblems
That bear the signature of Heaven, to snare
The shallow ones? Beware!

President Core now introduced Professor Lucius W. Hitchcock, of Buffalo, whose remarks follow:

## *Criticism of Pictures by Professor L. W. Hitchcock.*

I hope you will all bear in mind something you have been told to do a great deal, that is to keep happy. It will be rather difficult to see these pictures, as they are small; but you have been studying them on the walls as well as I, and perhaps that will help you. I have taken down these few pictures to call attention to certain things, and to compare one with another to some extent, because criticism is nothing unless comparative. Here is a portrait from the Brush and Lens Club exhibit, of a child. I have a theory which I derived from studying the old masters, that the space devoted to whatever you are doing must bear a proper relation to the subject; and in putting a child into a space it is always expedient not to make the boundaries too close, for by so doing you make the child look large. Of course, none of these pictures are life-size, but they must bear a proper relation to their surroundings. In my opinion this child is too large for the space given it. It looks large and heavy, like a full-grown person, and that takes some of the childishness away from it. I think to have that abrupt right-angled triangle in the corner is quite disagreeable. That could have been carried down with some sort of an accessory, and the child would have looked more childish and been far more pleasing. Here is a photograph by Dyer, of Chicago, a perfect example of spacing. Mr. Todd is a full-grown man, and he looks it, and this same head bears about the same relation to the space it fills as does that child. That child's head may be a trifle smaller; but here the effect is quite satisfactory. His placing it at the top gives a very pleasing variety of spacing at the top, side, front and bottom. Vandyck, when he painted a man's portrait, especially a full length, always placed it in a frame; and if painting a child he would drop it lower in the frame, to give it the sense of being small.

Here is a little portrait by Hoyt, that I find a very pleasing combination of spacing. I have one criticism, however, to offer that has been partially overcome by the manipulation of his light; still it is a little bit severe. If that light had been allowed to go down to the edge it would have been downright disagreeable, but Mr. Hoyt put a shadow over that side which, to a large degree, softens the abruptness of that line.

Here is a little landscape I got out of the Brush and Lens Club exhibit which has pleased me very much, a delightful combination of spaces—a very simple thing; but it took an artist to see it. What I like particularly about it is that the dark is kept in the middle distance, silhouetting itself against the faint distance beyond, centring the interest there, and then the faint silhouetting gives the picture great depth. It has a great deal of simple charm.

This is a picture of Seton Thompson made by Schervee—a very beautiful thing. I admire it very much. It has all the plastic qualities of a painting. I wish to call your attention to the beautiful passage from this place back into the shade. The way he has worked that passage over those hands is as clever as it can be His spacing is absolutely faultless. The man seems to be in the space properly, and there is not too much room, or too little in any particular part. That particularly is praiseworthy. If you have a chance to see the picture again at close range, please take notice of the way in which that passage from light to dark is worked. There are some pictures upstairs that I have not got in here which show a pronounced abuse of black. The minute you make black perfectly black it ceases to be luminous, and you butt up against it like paint. As long as you keep it less black it is luminous and transparent. You take a perfectly black body and place it immediately in front of the eye, and it is black. Remove it to the end of the room, and it will appear a lighter shade of black than when placed much nearer the eye. If you had two bodies of precisely the same blackness, the one placed at a farther distance would look gray and the nearer one black. Place the same object a half a mile or a mile away with the atmosphere for a background and it is blue, taking on the color of the atmosphere. The same thing is true proportionately in a studio; otherwise we could not get a sense of distance.

A Voice: What advantage would a little more space be on the top of that head?

Mr. Hitchcock: I do not think you need it, because he is a big man, and it gives him a sense of height. You will find a very good precedent for that in the old masters. To my mind that is very satisfactory.

Here is a picture by Hollinger. I have noticed in pictures of a delicate character something that some of you get, and some of you do not get. Mr. Hollinger, in my opinion, gets strength with delicacy. No matter how delicate the picture is, it always is strong, firm. You feel that that woman is strong and solid, as though she was drawn by Rembrandt. You can make pictures that are strong and brutal. Simply to put pictures in the dark does not make them artistic; simply to put a picture in the light does not make it delicate. That is another quality. A thing can be delicate and still shadowy. It can be strong and vigorous, and still be light. This has exceeding delicacy, and at the same time it is strong, and you do not feel she is made of air, that could blow her away.

Another picture by Hoyt, which is an illustration of what I just spoke of—delicacy with strength. Mr. Hollinger has strength with delicacy. Mr. Hoyt here has delicacy with strength. He has dark in combination, but if you look closely you will see the whole thing is luminous. It is as delicate in its feeling and its treatment as that picture of Mr. Hollinger's. I find these very agreeable spaces by cutting it off above, leaving the forehead, we get a pleasing contrast of spaces, none being alike, all being equal. Of course, if you carry that to extremes, drop that too far, you lose the sense of balance and proportion and gain nothing. You must have the feeling in order to do the thing successfully.

Here is a picture by Mr. Spellman. I wish to contrast this with another picture, to show why I think this is a great deal better than the other. In this picture you will notice he has done what I have just spoken of. I am not at all sure I will have you with me on this, but this is my opinion, and to express that is what I am here for. I find this more artistic than that, because of the abuse of black in the latter. It seems to me these darks do not go back. This picture is full of atmosphere, a quality that the other entirely lacks. That has a character of furniture polish—a something that is right on the surface. After all, the photographing of the atmosphere, as well as what you see, is the quality that makes things beautiful. It is the air that makes everything beautiful. All the colors in nature would fail to harmonize if it were not for atmosphere, which has the softening influence that comes between our eyes and what we see, that makes it beautiful. This dark being softened down makes this strong and luminous. I find that spacing bad. I find it would be better if cut off a little on the top; that gives a sense of the old lady dropping out of the picture.

I have brought down this picture, which is a good example of the genre stuff which photographers do, the stuff that goes on the market—commercial stuff. It is a good subject—old man and a boy, both interesting subjects. I wish to show how the accessories have been entirely misused. In the first place, that rag carpet running directly across the bottom of picture, parallel with its bottom, is extremely bad. You only repeat the straight line, which is not pleasing. Take the carpet in itself, the carpet is not bad. I wish to show how, by the proper manipulation of the things around us, they can be turned into good pictures; for instance, the trend of this carpet from the boy down to the man is over this way; that leads us up to the old man, and this hand, coming lower than the boy's hand, naturally gives us a sense of sweep off that way. That I find too big, too light. If this carpet had been turned so as to run off this way, or over there in perspective, I think I should have preferred that. This bag should have been dragged down far enough in the front so as to carry the eye down to lead out to this. That accessory should be put over here, not straggling over the floor. This should have been picked up and carried back into the picture there, so we would have had a fine sweep, but not across the centre, down here. These things have been put exactly in the wrong places.

Here is a little portrait by Mr. Hollinger that you have all seen up here, which pleased me very much, because it has such a perfect rendering of values. He has not confused his black, as so many have. You notice that that black accent on the hat is away above everything in the picture. It looks transparent and luminous. I think that a very pleasing thing for that reason. The picture is very small, yet it gives the sense of a big, grand woman, because she fills the spaces.

Here is a little picture by Mr. Core. Mr. Core has a beautiful, tender quality about his delicate things. I admire that in a great many of the pictures. I have a little criticism about these pictures. I find if that spot had been kept a little more black there, that this space would have told more. That was very probably brown in color. It represents a spot in the corner. There

should have been less shade there; it was not in nature, I warrant. In any case, he could have forced it a little. The object there is pleasing, because it comes in the right place. I just criticise the value of it.

Here is one that I could claim is more charming for that very reason. There is a certain unity, keeping one accent on the picture. It draws the eye immediately to the child. There is nothing distracting there. Is it not true there is a certain unity to that that this other lacks?

Here is a picture by Histed that I admire very, very much. I think it is almost as good as you could make it. You see here the child is given room. The child, therefore, looks small and petite; does not look like a full-grown person. To me that child, taken out of a Boston Brush and Lens Club exhibit, does not look like that. It looks like an inflated child, as though you had blown it up. That, you see, is a long way from black. It is full of air—transparent. It looks childish. Altogether, it is all right.

Here I have another from the Boston people. They have some beautiful things down there, and I mean to praise them very highly. They show a fine spirit; good conception. I want to make a criticism upon people who sketch upon plates. You must remember that the camera, as I said the other day, is the greatest draughtsman in the world. When you attempt to compete with photography you are putting yourself in competition with a perfect draughtsman. That as a sketch is very mediocre. Almost any student could sketch better. It is in competition with a perfectly drawn outline; and comparison is bound to be odious. If you are asked to sketch a photograph, do not do it. Simply because a thing is rough does not show it is good. A very large number of public men want something that is flattened with a mop; another man likes to have fine pictures. Because a thing is broad it is not necessarily good, and it is not good because it is dashed off in a minute, nor because it takes ten days to do it. It is only good because of its other intrinsic qualities. When you come to sketch a plate I think you ought to be pretty clever, you ought to know what you are doing. I have seen quite a number of those misguided, rough things made by people who thought that the roughness was something good; but rough things are not necessarily good.

Here is a little thing by Mrs. Käsebier that I particularly love. The variation of those spaces, by running this down so far, is very pleasing, because the detail has something in it. There is a little detail through it all, a pleasing variation of the spaces, top, bottom and on the side. Here is another picture by Mrs. Käsebier. For the reason that the dark note is not repeated, it is altogether very dignified, very quiet, very charming.

Mr. Clarence Smith now announced the social features of the day, including an invitation by Professor Griffith to visit the Art Museum in the evening.

President Core: There is not a member of the Photographers' Association of America that will not be glad to again hear Professor Griffith, who will now address you.

MR. PRESIDENT, LADIES, AND GENTLEMEN: My subject this morning will be in a general way "How to Manage a Gallery," although I do not know anything about it. I am going, however, to give you some suggestions as to how I would manage one, which I hope will entertain you. My ideal of a gallery is a little country gallery. I have often heard people who owned a gallery in a little town say, "Oh, we cannot do anything there; our people do not want it; there are a good many reasons why we cannot do it." Let me tell you that very fact that you can do these things is of some value to you, and that when you come to look at other people's work you feel "I am equal to that; I do not need it where I am, but I will need it some time."

We will say you get up in the morning. If I have any work on my hands that I want to catch up with it is better to get up at six o'clock in the morning, go out in the woods and sit down on a log, some place where one is away from everybody, where you can hear the birds chatter, can study nature and get a good rest; then come back about seven or eight o'clock with an appetite for breakfast. I eat my breakfast then and go off to the office. The first thing that comes in is a lot of mail. I know each of you has some mail to look after. Do not neglect it. Have a lot of pigeon-holes for it. Put the letters in one place that you have answered; in another those that require an answer, but which you cannot answer at once, and have a systematic way of filing your correspondence. Always answer every letter immediately, if you can. There is a religion outside of that of the church, and one great tenet of that religion is that you should answer every letter that you ever receive. Now, I know sometimes it is neglected; but if you cannot say any more tell the man on a postal card that you received his letter. Let him know that it reached its destination at least; then that duty is done. You can file his letter away for future reference. If the letter calls for an answer you are not prepared to give, acknowledge it and tell the man you will answer later.

Your mail having been disposed of for the day, customers begin to call in. But first, as Mr. Hollinger says, you want to be pleasant with your family, and you want to leave your family in a good humor; see that they have enough firewood for dinner; see that everything there is left in good shape. Then you go off about your business. Here comes a visitor—old Mr. Brown. Perhaps he has just dropped in for a moment, and you engage him in conversation. He has an old hat on his head, old clothes. You ask him how his potatoes are getting along; talk to him about the crops, not about pictures right away; he does not want to talk pictures, although possibly the old lady, as he calls her, has told him to call in and "have his picter took," and he is going to do it. Talk to him about his son-in-law, or his daughter, or grandchildren; get in touch with the man. Finally lead him up in the gallery and show him some pictures; but do not talk pictures the first thing, you know. Get the old man to feeling at home, and the first thing you know you have taken his picture.

Next there comes in one of those bright, beautiful little country girls; you talk to her in an entirely different way. You commence by talking to her about her beaux, not the crops; she is not interested in them. You talk to her about the young men that are coming to see her. You understood that she was at a party the other night; how did she enjoy it? Presently you invite her into the gallery, and before she really appreciates what you are doing you have made the negatives.

Here comes a sad-faced old lady. She has lost husband, or son, or a daughter, and she feels that the world looks black to her; the birds do not sing sweetly; everything is going wrong, and the world is not what it ought to be or once was; everything is gloomy to her. Now, you want to take just the opposite tack with her. Do not try to go over her miseries with her, she has enough of them; do not try to sympathize with her, but greet her in a friendly, kindly, genial way, trying to let her feel that there is yet remaining some charm in life. Life is worth living. We do not want to forget the dead, but we have enough of them around us all the time. Fill her heart with love and sympathy, with the things she yet can do in the world; make her forget her griefs, and the first thing you know you have a picture of her.

So the day goes on. In the afternoon you take up your retouching. Of course, you have to do that yourself; there is not enough, possibly, to keep a man especially for that. Do not retouch all the wrinkles off that glorious old lady's face; leave some there for people to know her by. She is no longer young. Her face has now a different charm, a glory all its own, because of the trials she has gone through. Smooth all you want to the wrinkles from the faces of the young girls; make them as beautiful as you can. Make that young girl feel that that is a picture of her—possibly a little better looking, perhaps. Yet a portrait painter does not in any way idealize his faces. I have told you again and again how people sit before portrait painters. Why, Rembrandt, when he did his most magnificent work, and the people said to him, "Oh! that is a magnificent portrait," there was still a sting at his heart, because, he said, "They do not talk." That was the idea he had, and there was a lingering disappointment there. Now, make your picture talk! Make it so you know what kind of a young woman or old lady it is before you. A gentleman spoke to me this morning of a picture which I have looked at many times in the gallery, and he told me that the subject of that picture was deaf. Now, when you look at that picture you see him standing with his hands down beside him, and as sure as you observe the picture carefully you know he was deaf, and you begin to feel that if you look at him he will put his hand to his ear. Sometimes I take up a photograph and can tell

you exactly what kind of a man or a woman that was. Then, again, the impression I get is obscure and vague; I do not feel that I know a thing about it. The subject probably came in, had on his picture face, and the result is you cannot take from the picture any impression that is characteristic. Environment and circumstances are the things that make us and make our world. We start a boy with his A B C's: by and by he learns to write; after he has acquired that art he begins to take on a character of penmanship that belongs to him, and by which you can always tell that handwriting from everyone else's. In the same way your subjects have a distinctive character expressed in their every look and movement. By study of this you are enabled to bring it out in the negative properly.

The matter of retouching having been attended to, you have your printing to do; in the evening you look over your work. You say to yourself as you examine some one piece of work, this was a failure. You do not say it to your customer, of course; if they are satisfied you get their money, don't forget that!

Next there is a pile of bills up on the file that have come in, and which you will have to attend to to-morrow or next week, or next month. Make your collections systematically; get the man's or woman's money, or you will not be prepared to pay those other bills that you also have on file; but do not be satisfied simply to get the money of your customer. Make them feel that they have gotten more than they expected—more than their money's worth. You can always do that. Whenever people feel that the pictures you have given them do not represent the money's worth you will not get them back in your studio again. Always make them feel that they have had a little more than they paid for. You can do that in a genial, pleasant and agreeable way. Do your swearing in the dark-room, too. Keep your frowns behind the screens. Smile, and smile, all the time; play the villain, if you want to—only smile Keep your best mood carefully outside—and watch the dollars!

After you have looked over the negatives, you say, "This is good." "That is bad." "The other one I wish I could do over again." "I will do better than that if I get another chance." That is the country photographer. He, like Millet, can go out into the fields, and live among the people, the poor people who live nearest to nature in the country. Like Millet, living close to earth he can look up to the blue dome of heaven, and again at the streams, the rocks and fields and forests about him. He is not cramped up by four walls. In nature he can find the best models in all the world, if he will only study and work. Genius, they say, is only another name for hard work. Do not, then, be satisfied to go off to a country fair, and say, "It is all right, I will be back next week and make some more pictures." Go to the fair if you want to, have a good time, but come back and get out under the stars and see if you cannot think of something that will make people value the pictures more that you take for them. You people in the country have the opportunity to read and study, if you will only improve it. Study that which is all about you. Do you suppose Millet ever painted angels in Paris with its barricaded streets and revolutionary mobs, Paris with its stir and turmoil? He never could have done it in the world, because the atmosphere was not there. What did he do in Paris? Painted naked people until people came by and looked in at the windows and said, "There is another naked woman, or naked man again, by Millet." And he said, "I will get out in the country. I will paint nature as I find her; and he painted the "Angelus," and a hundred other things. Do you suppose he was satisfied with it? Not at all. We do not appreciate the "Angelus" in this country. Why? Because we are differently constituted from those French people. In that little town of Barbizon are old farmers that have lived there and their ancestry for centuries; their great-grandfathers and grandmothers before them were born, baptized and died there, and worshipped at that little old church. Every man and woman knows every other man or woman; they meet all on one common level; to them there is no creed in religion, there is no Baptist, no Methodist, no Presbyterian; they are all Catholics, and they look upon the Mother Church as the one religion. They are filled with its spirit; they are deeply religious; and there digging up potatoes in that field, as the evening sun goes down, and the mellow-toned bell, that has pealed from its brazen throat for centuries calling them all to cross themselves and count their beads and say a benediction, sends forth its deep vibrations upon the quiet evening air, they turn and cross themselves, and count their beads, and say their Ave Marias. We are too busy in this country, and such a scene is well-nigh impossible here. Now and then one calls a halt, but the great mass are out looking for the God of Dollars; and it is right, in a sense; we have to live.

Let us look at the city photographer for a few minutes. I must pass on rapidly, because I feel that the time is limited. The city photographer lives in a flat, perhaps four or five stories from the ground. He is surrounded by many comforts, and many luxuries. He does not have to get up to build a fire; the fire is there; the place is lighted and warmed, hot and cold water in the bath-room, all the modern conveniences around him. He has but to turn on the gas, and he has a fire for the kitchen or for the breakfast; but he has slept all night long under the seething heat that never leaves the city pavements. He has not enjoyed a good night's rest like his brother in the country. He gets up a little crabbed, of course, and shaves himself, because he wants to look neat and nice and genteel. He is late at breakfast, because he is not ready in time. He jumps into the car, is hustled down town, up the elevator, and into his gallery. What kind of a mood is he in to take pictures? That man has to fight human nature; and the human nature in him cries, "Oh! that I could only swear once in a while." That is human nature. We are, all of us, more sinners than saints. He comes in; the boy has not swept out the studio; the young lady who looks after the books has not come down; she is late. Somebody sick at her house.

A customer comes in. What that man ought to do would be to go right out in the dark-room where there is some running water, bathe his face, give his hair a fluff, and come out smiling at the lady as if he had never seen her before. He wants to be ready to meet those people, because he has for the last twelve or fifteen hours had a discouraging battle to fight, and he is ready to go off that quick! I remember a young lady who was very much overworked, and was looking wretchedly. She went to the doctor. I said to the doctor, "What is the matter, doctor, with that young lady?" "Oh! nothing at all, only she wants to get away from home. She ought to go. If she does not go she will be sick. She has been kept within four walls associating with the same people until she has gotten all unstrung, and wants to fight with everybody." You go into an Indian tepee; the opening is always toward the east. Very rarely you find it otherwise. Each division of the family has its own separate part assigned. To the left, as you go in, is the squaw's place; that belongs to her; there she has all her culinary utensils, etc., and any one that intrudes on her gets fired out. Directly opposite to the camp fire, next to her, is the old man's place, and under that blanket or buffalo robe he has his pipe, his bows and arrows, his gun; that belongs to him. Next to that, opposite the opening, is a place reserved for the visitor. Every visitor is welcome in an Indian's tepee. This space then is reserved for him. But the camp fire is in the centre; if you value your reputation and welcome in that place do not walk between the camp fire and the old man to get to your place; go around this side, and take your place; it is all right if you walk in front of the children, on this side. Now, there comes a time when the Indian and his family group have lived together there for months in one place; and when he gets the blues he does not want to talk to anybody; he quietly puts his face to the wall of the tepee, turns his back on the whole crowd, and every man that has lived with an Indian, every squaw, every child, understands that at such a time he wants to be let alone. You people do not know the value of being let alone. There are times when I want to get into a room by myself or out in the woods; I want to be alone. I want a chance to think, a chance to commune with nature, and get nearer to her. I want to be let alone. Most of you people at such a time go off down town and find some other fellow in the same fix and have a drink with him. That is not what you need. You want to get some place where you can be alone and think, and you will come back with a smile on your face, and you will make better pictures; that is the idea! After a man has been making pictures all day, and things have gone wrong, he looks over his negatives, and feels disheartened; that day is lost. He had better have turned his gallery over to somebody that day, and gone out and communed with nature.

I wish you people all had a river like this in front of your house, so you could hear it ripple, and know that you were out-doors. You cannot all have it; but you all have woods and mountains within easy reach of you; that is what we have not got. I get lonesome for hills. I want some hills to climb This country is all a dead level; a beautiful park—but I am dying for a hill.

You people never want to be satisfied. I ran across a man at the convention a year ago who said, "Well, I am all right, I am the leading man in my territory." I thought if that is the way you feel there will be another man step in there perhaps six months from now who will not feel that he is leading, but who will walk right past you. (Applause.) You say you are making pictures good enough for your people. You are not. Bring your people up to you. If you do not, they will go off on a visit somewhere, and will come home and say, "He does not make pictures like I saw." Or somebody will send a picture from an outside place, and they will look at it and say, "I cannot get that kind here." (A Voice: "Don't make them too cheap.") Yes, I am glad you said that. I have said that to you before. But if a man or woman comes in and has two dollars, give them the worth of it, and at the same time show them there is something better. If a woman goes into a dry goods store and asks to look at a piece of calico, they show her the calico; but if the clerk is shrewd he will give her not only the calico, but will show her a piece of satin, and she will never be satisfied until she has it. That is the way they do. A storekeeper asked a clerk one day, "Did you sell Mrs. So-and-so anything?" "No, could not sell her anything." Another clerk spoke up and said, "I sold her that piece of goods that we have had up there on the shelf for a good while." "Is that so? You sell that?" "Yes, sir." "Well, you are the man I want; you sell something; you have sold what the other man could not sell." Now, you are the fellow. And how did he do it? By keeping it on the shelf? No, by getting it down before the customer. Do not be afraid they will see another's work; do not be afraid to show them your own for fear they do not want to buy.

I have found little men as little in soul as in body sometimes. The big man is always big. You go into the best photographers' galleries of this country, and they will tell you anything you wish to know. They are not afraid to give you five minutes of their time. (Applause.) They did not learn it in five minutes, and they do not think you will. They are willing to help you. The little man who only knows a little of little things thinks you can learn it as quickly as he has learned the little he knows, and so he don't want to tell you anything of it. One man said to me yesterday, "This thing is so big I cannot take it all in." Now when he goes home he will recall some of it; he will remember what a lot of material he saw, and he will say, "I am going to do as good work as any other man."

Do not be too afraid to use your plates and your paper. If no customer comes in, go out and hunt one. The world is full of material. One man says, "I have to go to Germany to paint." Why? Because he wants the German atmosphere. Another man says he must go to Rome. Why? Because he wants the Roman atmosphere. I say to them both, "Why go abroad when you have landscapes within ten miles of you that you cannot improve upon? But if you are going to paint an Indian you must go where you can find him, that is true; otherwise you do not get the atmosphere. You cannot paint a landscape up in a fifth-story room, where you do not see any landscapes. Another thing; find your specialty. Do not scatter all over the territory. If you make baby pictures, make baby pictures for everything there is in it. Do not let Core have it all. He has no right to those things that you have not. If I was making baby pictures I would make Core hustle or die trying. If you want to make genre pictures do not let Guerin make them all: he has no monopoly of it. But find out what you can do.

We all see pictures through different eyes, different temperaments. One makes a picture and says it means certain things to him; another finds a different meaning in it. It is like girls. I do not want the girl you like, and you are perfectly willing I should have the girl you don't like. You see her through a different temperament, with different eyes. It is fortunate that things are so, because we can be happy with those that we select as our friends and associates. It is the same way with a picture One man paints blue, another purple, another the golden light of the evening. A Dutch woman said to me once, when she was asked what color she wanted the roof, to paint it red, because she could not see pink. There are a number of people in the world like her.

Remember all the time to stay away from the highest light and the deepest shade; because it is between those that you should work. If I am to make a speech I try to think of something to cap the climax with; I do not give the climax until the last. Then I want something to leave with the people. Pictures are the loopholes of the soul. You can do without them if your soul is small enough. There are a lot of people for whom a teacup would be large enough; but another woman or man wants the whole broad earth to take them in; and then want to take in the earth. That reminds me of a woman who sold some shot, and having no scales she measured the shot in a pint-cup, because she said a pint is a pound the world over. She measured everything by the one small measure. The world is full of souls that are just that small; but there are not many among photographers. At least, I have not found them. (Applause.) It is the great big souls that you want, the people who can see something in that old man's face and that old woman's face, in the young girl's face, in the child's face; that can see something in nature that is worthy of preservation in a picture that people will stop and turn around to look upon, and look, and look again. We go into a gallery, and out of a hundred pictures we remember three or four. I remember in going through a gallery at Munich a picture of two little girls. I think I have spoken of it before—two little girls standing on the bank of a stream, their wooden shoes cast off. They have gathered a mass of dandelions, which are scattered like a golden shower all about their feet. The older child has made a chain of dandelion squills, and placed it about the other's throat, and she is drawing her up to her by this chain until she can press her lips to hers. My eyes filled with tears, because I remembered two little sisters seven thousand miles away.

People stand in admiration before that wonderful piece by David, of Napoleon the First, although there is nothing but the head and hat in it. That was a marvellous man, with all his faults. That statesman, that financier, that soldier, that patriot, that man who could grasp ideas, looks at you and fascinates you, appeals to you, and you admire the magnificent face. We express what we are. If you are a miser your lips come together, your fingers clutch. If you see the little wrinkles coming here, do not touch them out. But when they come here touch them out, for they are the mark of a sour, crabbed disposition. You want to flatter by taking them out, and he will think you are a jolly good fellow, and he will leave you with the feeling; but you are keeping one hand on the pocket-book, where the dollars are, while you shake hands with the other. I thank you.

President Core: Ladies and gentlemen, we are about to adjourn the Educational Convention. In resigning the gavel to my successor and in reminding you that the next time we meet there will be a new face on the platform, I desire to express my hope and belief that you will give him the same hearty support that you have given me. I thank you.

On motion, adjourned sine die.

---

*Stage.* Messrs. Langfier have recently fitted up a stage capable of accommodating forty people, whereon garden parties, river picnics, and similar outdoor functions can be photographed, without discomfort to the sitters even in the most inclement weather.—*Photo. Chronicle.*

*Number of Photographers.* "Dealer."—According to a recent count from the latest directories, the number of photographers in Great Britain and Ireland, with a business address, is between 4000 and 4500. Taking retouchers for the trade, black and white artists, and other trade workers, the number might possibly reach 5000; there can hardly be 6000, as stated.

# SELLING PRICES.

WHAT shall be the selling price of his photographs? is the most important question the professional is called upon to answer. Various issues are raised, and so many considerations have to be met and settled, that a right or wrong decision is vital in determining the success or non-success of a business. Should the prices fixed upon be too high, competitors will step in and seriously lower the demand for the higher-priced article; should they be too low, the status of the business will be reduced, the better class of customers bestowing their patronage on a rival. In both cases the business will suffer a falling-away of clients.

### QUALITY AND PRICE.

Whatever kind of work is done, there exists a close relationship between the quality of the photograph and the price it will command. The general public may not be expert judges of portraiture, of artistic merit, or technical finish, yet, by some means, they invariably form a correct estimate of the qualities of a photograph and the abilities of the photographer. The best work is always recognized as such; it secures a reputation and the consequent patronage. In most neighborhoods clients can be found who will support the man capable of giving them high-class productions, and are satisfied to pay good prices, simply for the name of the producer, as the hall-mark of superiority. Having this name, the photographer may almost fix his own prices, quite independent of what are the general rates in the locality. Once in possession of a name for superior work, it is essential that the reputation be sustained, and prices may then be fixed more on a knowledge of the social status of clients than in reference to the competition rate and the charges of other photographers. High-class portraits will always be sought after; they are obviously a luxury, and being comparatively rare they secure fancy prices; they advertise themselves, sitters are attracted from long distances, and the business ceases to be a purely local one. For these reasons, superfine work must always stand alone, the price being excessive, or, at least, very much in advance of the usual rates.

### COMPETITION AND PRICE.

Beyond the field of work which depends for sale on quality alone, artistic taste, originality, and technical finish combined, there remains an opening for that which is supplied to meet a demand. There exists a permanent need for work of general excellence, supplied at rates that are not beyond the resources of intending purchasers, and hence the man who can meet this call at the lowest prices will secure the largest amount of patronage. Such prices are regulated entirely by competition of quality against price. If a locality is supplied by a photographer doing a certain quality of work, it will be useless for a competitor to ask higher prices for work of no better quality, or lower prices for work which is inferior. To attract custom, the portraits must be of better quality, supplied at the same or cheaper prices. To supply at a cheaper rate is, however, a mistaken policy, because it lowers the general rate; prices fall all around, and every photographer in the locality feels the effects—the competitor who commenced it in common with all others. To start a new business in a town hoping for custom on a reduction of prices is an error of judgment; it may succeed for a time, but, in the end, it must result in a general depression of prices. The only way to successfully compete with others, and to keep a business together, is to improve the quality of work and raise the price.

### HIGH PRICES.

High prices are, in every instance, advantageous to the photographer. Photographs are, for business purposes, works of art; they cannot be classed with sugar or coal, as things people must have—necessaries, in short—and the price is not, like sugar or coal, fixed in the market, to a large extent by the buyers. Skill enters largely into the production of photographs; it controls the price more than the cost of material or manufacture. The photographer has always to find a value for the

skill he has displayed; if he puts this too low he degrades his status by under-valuing his abilities, and receives his profits, not on skill, but on cost of materials. By making skill the standard of value, the photographer receives his returns from that which yields the largest percentage of profit, and makes them independent of materials and cost of production, from which his profits can never be very large. In settling his prices, the photographer must always take into account his training, the years he has spent in perfecting himself in his profession, rather than the bare cost of materials, etc., required in producing his work. Like the artist, he must charge for skill, and not merely to make a profit on the cost of paint and canvas. We thus see that the status of photographers controls greatly the prices of portraits; the higher the status of a photographer, the better able is he to demand, and obtain, a high price for his productions.

Beside this, he deals mainly with persons who are purchasing luxuries; the price paid by them will not interfere with or cause them to curtail their ordinary expenditure; hence, the photographer is dealing with clients who can afford to pay on a higher scale than could be expected for necessary articles. It is also generally overlooked that the photographer is not supplying a constant demand; his customers are mainly casual, and it is not to be supposed that a business of this nature can regulate its selling prices on the same lines as those which supply a daily or regular need.

LOW PRICES.

The photographer who reckons the cost of material, wages, and indirect expenses, etc., and then allows over and above this a charge of 10 or 20 per cent. for profit, and puts his prices in agreement with the final figures, will soon find that it is impossible to carry on a business on these terms. Prices must be put down to give quite 33 or 50 per cent. profit above cost of material, wages, and indirect expenses, otherwise a deficit will occur, arising from the fluctuating and casual nature of the trade in photographs. The professionals who try to supply a dozen cabinets for $2 cannot make it pay. When they do survive, the profits are realized upon frames or enlargements, or from an extra-priced photograph at $5 or $6 per dozen. Even to deal in quantities at these low rates does not yield a profitable return, because the market is not yet extensive enough. Millions of photographs must be supplied to make it pay, and such a demand is not yet reached. The intrinsic worth of a dozen cabinet portraits cannot be made the standard for regulating the selling price. The skill of the photographer, slack seasons, the fluctuating demand, the fact that the article is a luxury, and the first to feel a depression in trade—all these must be allowed for. From these various reasons, we conclude that the public are by no means overcharged for photographs, and that professionals would only be doing justice to themselves if present rates were advanced 25 per cent. all around.—*The Photographic Chronicle.*

## THE VIGNETTE.

BY A. LOCKETT.

VIGNETTING cannot be called artistic, and, what is perhaps still more important, it is fast going out of fashion. You never see vignetted portraits at the exhibitions, and even the average good class professional photographer now turns out nearly everything printed plain—to his own great satisfaction, no doubt, since it saves time and trouble. Nevertheless, from an amateur's point of view, it remains decidedly useful, for now and again we must go in for "backyard portraiture," as the sage of Whitby so appropriately terms it, at the solicitation of Philistine friends, whose idea of how they should be taken soars no higher than "just head and shoulders, please—never mind the hand." Now, there is a sort of fatality in this kind of work, and whether it be through an extempore calico background full of creases, which the photograph faithfully reproduces; whether it be the simple necessity

of keeping out something clumsily gigantic, or of hiding as much as possible of that old dress, "which wasn't put on to be taken in, you know," that backyard portrait is tolerably sure to need vignetting.

As to means and methods, we have a choice of evils. First comes the graduated ruby glass, perhaps one of the earliest devices for the purpose, and very effective, giving soft shading and pure white margins; it has, however, the disadvantage that unless we can keep a large stock of different shapes and sizes, we cannot always suit them very well to our negatives, especially when, as often happens, the sitter is not quite in the centre of the plate. The same remark applies with equal force to those made of deeper and lighter shades of yellow muslin, or of diminishing layers of tissue paper, but except for this one objection, they are generally very satisfactory. There are also several ingenious contrivances made for attachment to the printing frame, of which it would be unfair to single out any particular one for accommodation, since they are all excellent in their way.

The method now principally in use among professional workers, however, simple as it is, can hardly be improved upon when properly managed. A sheet of cardboard or thin metal having a hole cut in it, of suitable shape and size, is tacked, or otherwise fastened, on to the front of the printing frame. It is necessary in most cases to increase the distance between the card and the negative by nailing four thin strips of wood around the frame, since the softness of the vignette depends on this distance; about an inch will not be found excessive.

We are here, it will be seen, given a practically unlimited scope for variation in the size and shape of the opening, which can always be made exactly suitable to the negative. For the ordinary bust portrait an oval or pear-shaped aperture is generally used, but here is a grand opportunity to bring our pictorial individuality into play. As a sort of protest against the sheer vandalism of vignetting at all, let us wander from the beaten track and make our openings of a more broken and irregular shape.

It is necessary to turn the frames around occasionally while printing, or a hard line may result. Greater softness may be obtained by pasting tissue or oiled paper over the opening; this plan, though very suitable for thin negatives, much increases the time of printing. Where this is no object, it can be recommended as always a decided improvement.

The opening must be cut considerably smaller than the vignette is desired to be, since the light spreads a good deal after passing through; a few trials will soon indicate how much to allow in this respect. The light will spread most on the shadow parts of the negative, as, for instance, a dark coat or dress; it is often expedient to control this by the insertion of a tuft of cotton-wool between the cardboard and the glass. Parts which tend to print too much can also be restrained by a little color sprinkled on the back of the negative or by matt varnish. A picture with a dark background will naturally require a smaller opening, and *vice versa*, but it should never, as a rule, be larger than the space covered by the figure.

The edges of the vignette opening are improved by being just a little rough and jagged, this tending to prevent a hard outline. The picture ought not to suggest any distinct shape or boundary; if when seen from a distance, so that detail is invisible, we are at all reminded of the hole in our cardboard, we have simply achieved success in the preparation of a sublime atrocity.

There is, of course, a right and a wrong way of vignetting. It is a great mistake to vignette too closely, unless there is good reason for it. Then, again, there is a sort of unwritten law as to how much of the figure, in portraits, should be included. Suppose it is a bust of a lady, it is not generally advisable to go below the waist line, if even as low as that; while if ungraceful arms have to be dealt with, the opening must be cut narrow to exclude them. A gentleman's portrait looks best, perhaps, if vignetted to just below the waistcoat opening; a prospect of watch-chain and seals is not generally an improvement.

Silver prints require frequent turning, since the edges are so liable otherwise to look hard and wooden. The ideal to be aimed at is that the picture should shade off gradually and imperceptibly till it disappears in a pure white margin; unless

this is attained, the effect is simply added ugliness.

In vignetting bromide prints, we must not omit to paste tissue paper over the aperture, and the frame should be slowly revolved or moved about while exposing. A smaller vignette will, other things being equal, require a longer exposure than a large one, somewhat after the principle of lens diaphragms. The vignetting of enlargements presents no particular difficulty; a piece of cardboard or stout brown paper, with a suitable opening, is held at a proper distance, ascertained by experiment, between the easel holding the paper and the enlarging objective. This card is moved slowly about, without diverging much from its required position during the exposure. It should be noticed that the card is of more than sufficient size to shade all the covered part of the bromide paper, or fog margins will result.

Fate sometimes unkindly decrees that we have the misfortune to crack a negative, perhaps intended to print plain; stern necessity then probably dictates that it must be vignetted. First of all, it must be bound to a piece of ordinary glass by strips of gummed paper around the edges. The crack will then require some sort of spotting or retouching. If we have been lucky enough not to break the film, only a little pencilling will be necessary along the line to overcome the refracted light from the edges. If, on the other hand, the film is damaged, color must be applied over the broken parts, a little gum being added to make it adhere. The vignette should be so cut as to block out the crack as much as possible, and tissue paper must be used. It is a good plan to take a rather deep box, the size of the printing frame, and to place the latter at the bottom of this. The light can, then, only strike vertically on the cracks, and it is impossible for them to print sideways. Some people pin their faith on the rather humorous, but satisfactory, idea of suspending the frame from a roasting-jack, and allowing it to revolve. This conversion of a useful kitchen accessory to a purpose for which it was never intended is rather likely, perhaps, to provoke domestic unpleasantness.

We can sometimes add to the effect of a vignetted picture by covering over the printed part when it is finished, and allowing the margins to become very slightly tinted. The result of this is to greatly enhance the brilliancy and relief of the print by giving added value to the high lights, for it may be noted as a disadvantage of the ordinary white margin that it lowers the tone of the portrait by contrast.

Very satisfactory cloud effects can often be produced by stippling a little color on the back of the negative in the manner desired, taking care not to overdo it. Those who admire cloudy backgrounds can also, without much difficulty, make negatives for printing these after the picture is done, or for giving a hatched effect, in both cases by photographing a large card or canvas suitably drawn or painted. The portrait must, of course, be covered over in some way while the clouds are printing.

An ingenious method was suggested some time ago for making vignetting glasses from ordinary dry plates. A plate was exposed under a suitable cardboard opening in a printing frame, developed, and then used as a negative from which to make any number of glasses by contact. These transparencies were perfectly graduated, and had merely to be used in place of the glass in the printing frame. Another plan proposed was to take the oval-shaped piece of paper or card cut out from the opening and paste it on ground-glass. The latter was then placed in a frame with the card outside, and a negative made as before, the film side of the plate, however, being away from the ground-glass, to secure greater distance and softness—that is to say, against the back of the frame. The cut out piece having been used to make the negative, the latter is itself the required vignetting glass.

---

*Photography and Book Illustration.* A leading feature of *The Living Animals of the World*, shortly to be published by Hutchinson (London), will be the illustrations, consisting of over one thousand photographs taken from zoölogical collections in various parts of the world.

In a recently published work of this class *The Fishes of North and Middle America*, the illustrations represent 958 types of fishes.

# PRACTICAL ADVERTISING.

## The Kind That Brings Business.

BY CHARLES P. MARSHALL.

TALK NO. I.—WHY ADVERTISE?

FELLOW photographer, do you want more business? Want to be more than a plodder? Want to get out of a rut? Want a good thriving trade that will require your spare energy and extra help to handle? Then do some sensible advertising through your newspapers. Printer's ink is the power that moves all business these days of keen competition, and photography as a money-making business will get a new lease of life if treated with printer's ink in liberal doses!

Newspaper advertising for photographers is almost a totally neglected field. First, because the majority of photographers are brought up to believe they must "never stoop to common, commercial advertising to push trade." Second, because ninety-nine out of a hundred can't write the right kind of ads that bring business. Something fancy, fussy or feverish is generally the product of their pains. Not that their efforts are not sincere, but it takes study, training and ability along this peculiar line to write successful, business-bringing ads.

A little jolly froth dashed off won't do. Sounds smart to the office, perhaps, but lacks the seasoning of solid sense—the pulling power to any ad.

Don't think that because old liners and timers have always cried "Don't use printer's ink. It's contrary to art and lowers the tone of the profession." Nonsense! Boys, wake up! There's rafts of business all around you, and can be brought your way with proper advertising.

For years stock dealers have proclaimed from the "house-top"—"you must get such and such a camera; so-and-so's lens; this and that background, etc., if you would do business." All good advice as far as it goes. Certainly, get the best tools to be had. Make good work, learn how or hire some one who can, and then—advertise!

It is estimated by expert authority that twice the trade in photography can be secured by proper newspaper and booklet advertising.

Why not? Is photography so radically different from other business that it needs no publicity?

Don't you know that even dentists are driving in volumes of business with bright, newsy ads changed often, which a short time ago was considered a sacrilege to their profession.

It is said to have started like this: A certain young dentist, with skill and a few patients, considered his patience exhausted in trying to build up a clientage the old word-of-mouth way. Against the advice of his friends he "advertised" in the newspapers. Not in a frantic, desperate, rate-cutting, red-fire style, but in a dignified, courteous, sound-sense manner, changing his ads at every issue. His ads immediately attracted attention because they were well displayed, attractive, neat and newsy. He employed an able ad writer, wisely deciding that his own forte was teeth, not writing ads. People couldn't help but read them, they sounded so different from anything else. Then they began to find out a great many interesting things about teeth and their care, treatment, prices, etc. And the men and women who scanned the paper couldn't help but think of their teeth.

That dentist prospered. He not only became known as a fine workman, agreeable and honest, but was acknowledged authority on dentistry, simply because he had something to say and kept on saying it in a nice newsy manner. His departure from the old, beaten track created a desire for more dentistry. People who never gave a thought to their own or their children's teeth became regular customers. His trade flourished, as much from an increased demand for dental work as from capturing the cream of the old trade. Hundreds of dentists are now doing just this kind of advertising, regular newspaper publicity.

Now, it's granted you are up to date in cameras, lenses, backgrounds, etc.; that you have fresh, attractive prints. That

your cases are changed often and your help competent and courteous. From such you are sure to attract a certain share of trade. But mark how many more pictures will be made and shown, your name on every tongue and your studio a household word, if you advertise!

Do you suppose for a moment the respectable dry goods concerns, hardware men, druggists, etc., sit still and depend just on the customers that drift in, simply attracted by a pretty window display and occasional praise from their customers? Not any! They are moving every faculty to develop fresh, newsy advertising. They know their business thoroughly. Know they won't have much business—a mere existence—if they don't spread printer's ink!

Every one knows the success of Wanamaker, Siegel Cooper, Marshall Field, and hundreds of others is due to advertising. Now, is photography so utterly removed from all other vocations as not to need the potency of publicity? Emphatically no! Why, even churches advertise.

Haven't you observed how human nature, especially in America, wants to be told all about an article before purchasing? The world wants to be told over and over, again and again, but in some new way, the merits of methods and merchandise, (photographs are merchandise made to order; that's all).

The idea of getting all you can of the best you can for the least money you can is indelibly stamped on our minds; superior quality attracting some, low prices others.

Talk quality first, price next. Make the best photographs in your town then talk about them in your advertising. Not in a conceited tone, bristling with braggadocio, but sensible, modest praise about points which a prospective customer would believe and become interested in. Note the difference in the following style:

We are well aware that Wanamaker keeps everything in dress-goods, clothing, etc., but we are much more interested in his wares to read about them day in, day out. After a while we talk Wanamaker, deal with Wanamaker, and swear by Wanamaker, just because he has interested us by his newsy advertising. When we go there for some particular article, nine times out of ten we buy something else. This is the accumulative power of advertising, and John Wanamaker knows it. That is why he pays $15,000 salary to the man who thinks out his ads and puts the pulling power into them. It is not necessary, however, for a photographer to spend thousands or even hundreds to have some one write his ads. Able service can be secured for a very little per week, bringing it well within the means of any live studio.

If you make the best photographs in your town and advertise them right, you will be the acknowledged Wanamaker of photography of your place, holding the highest prestige and making money.

Has it occurred to you how the constantly changing styles in mounts is a powerful lever to move more trade? Of course, you buy liberally of new goods as fast as they are shown. But goods won't sell themselves unless helped by honest, straightforward sound sense, and persuasive talk in advertising. And inasmuch as it is neither dignified nor policy to have a barker or sandwich man parading before your door, the best and most dignified medium is the newspaper. Women are the buyers and the readers of ads. Rest assured if you have anything to say in the newspapers, women are going to know it.

The old way to introduce a new style is to fill the cases (not even a card announcing the name or price) and wait several weeks before the community "cottons" to them through some one's private praise.

The new way—business-bringing way, money-making way—is to tell it to the town through the newspapers. Such announcement coupled with cases filled with attractive prints never fails to bring results.

Every one is in the photograph business to make money, and any one who says contrary is much mistaken and is known to take his "recreation" on the quiet, pitching quoits or driving golf-balls. When under the skylight we are after the dollars, all we can get of them in a legitimate, business-like way. You might sit and gloat over a handful of medals, and still starve or have a spasmodic, mediocre trade! Skirmishing around the back edge of the field, spitting on your hands, getting a "good ready" for opportunity, if it should swoop down upon you, is eating up your rents, courage and credit. Wise ones will

clap on their spurs now and ride to the front! Good work and good advertising are sure winners. And the studios that will make money in the near future are those that turn out good work in a short time, medium priced, and advertise the fact.

But you say, "I haven't the time to write my ads, and when I do they don't read right, and nothing comes of them." That's the point to discuss right now. If you haven't the time or skill, procure the services of some one who has. There are plenty of excellent ad writers whose skill put into your business will give it life and prosperity. Be sure, however, you select some one who is in sympathy with photography, else his logic is dry and lacks the right ring that catches the customers.

Lastly, remember that all the advertising in the world won't hold trade and bring more unless the conduct of the salesman and the goods bear out the announcement. For if there's a place on earth where an Annanias comes to grief the quickest is in a photograph ad.

Think this over. Next month I shall have something to say about continuity in advertising.

## ARTISTIC PHOTOGRAPHY FOR REPRODUCTION.

SEVERAL of the most advanced pictorial photographers of the present day are becoming exceeding wise in their generation. A few years ago even those who clamored most loudly for publicity were content to believe that things merely mechanical were beneath them, and cheerfully supplied the worst of prints—from a blockmaker's point of view—when their work was to be reproduced. This, to say the least, was a great injustice to the photographers themselves, for the distinctive qualities of the present day work are just those qualities which are beyond the comprehension of the average blockmaker.

The mode of half-tone blockmaking should be familiar to all. The photograph to be reproduced is placed in front of the camera and photographed again to the size required in the reproduction. This is done through what is known as a screen—a piece of glass on which fine opaque lines are ruled, often 130 of them, or even more, to the inch; and these parallel lines are crossed at right angles by a set of similar ones, the effect being to give a screen composed of minute squares or dots of clear glass. This screen is placed close in front of the sensitive plate, and as a result the negative is really an immense number of little dots. These dots can be easily seen in half-tone newspaper work, and in the very finest of fine printing they will be very clearly revealed under a low-power reading-glass.

The practical application of this is that by this process of minute subdivision no true continuous lines are left in the picture. The tendency is to soften everything and to gray down all the whites and light parts. And this is disastrous to the low-toned photographs so often produced to-day.

In all publishing offices where photographic work is reproduced, artists are kept to "work-up prints"—to sketch in hazy details, and to give pluck by liberal touches of white paint. Where a photograph is to be reproduced as such—that is as a sample of the work done by a man, and not merely as illustrating some incident—it is, of course, inadmissible to tamper with it, and so it is left to the blockmaker to do what he can with it, and very often he tries to help it by a little fine etching; that is, etching upon the metal block itself, a delicate work of considerable skill. The fine etcher is faced with the same difficulty as the artist, for unless he is very careful his work will equally show and destroy any approximation to a *facsimile* representation of the original.

Photographers are now becoming more acquainted with the requirements of half-tone, and are learning how to prepare prints somewhat harder and pluckier for reproduction. One curious feature of this, as regards some extreme work, is that, thanks to this special care, and often to considerable reduction in size from the original, the half-tone prints represent the photographer more strongly and favorably than does his original work.

## NOTES: CURIOUS AND INTERESTING.

*An Ancient Advertisement* (taken from the *Connecticut Courant*, of Saturday, May 28, 1853):

DAGUERREOTYPES.

"S. K. Nichols (formerly Bartlett & Nichols) would call the attention of those wishing to procure a good likeness of themselves or their friends to his large and commodious Daguerrian Gallery, where they can have sittings for portraits or miniatures, and receive them beautifully cased in Morocco, Silk Velvet, Papier-Mache, and other fancy styles, or set in Lockets, Pins or Rings in a few minutes. While your mind is on the subject and you are in health and strength, do not delay. How many have lost a father, a mother, a brother, a sister, or an innocent prattling little child, and have not even the shadow of a resemblance to look upon.

"After the separation some 'little toy' or a trifling article is often kept for years and cherished as a token of remembrance. How much more valuable would be one of NICHOLS' perfect Daguerreotypes. Reader, while your mind is on the subject, take an hour or two and visit the gallery, then you may at some future period have reason to feel grateful for these gentle hints from S. K. Nichols, 168½ Main Street, State Bank Building, Charges as low as any, and all likenesses warranted to please.

"For portraits of adults by our process and improved instruments, a cloudy day is quite as favourable as clear weather. For children a clear day (between 11 and 2) is preferable; in dress avoid white, blue, or light pink. Whether visitors wish pictures taken or not, I shall at all times be happy to have them call and examine specimens. Country operators will always find a good assortment of stock on hand.

"S. K. NICHOLS."

*A Pebble Portrait.* Eight years ago Mrs. E. J. Bacon, of Atlanta, Georgia, found herself in Bavaria, and on Mount Kopfel she picked up a little stone. This she took home to America with her, and one evening, on going through a collection of travel souvenirs, she happened upon her Mount Kopfel find. She looked at it by the light of a lamp, and, to her amazement, discovered a face upon the surface of the little pebble. This pebble has since been through many hands, and all agree that it is a specimen of Nature's own handiwork—a portrait of the Man of Sorrows, which when the light falls on it in a certain direction and at a certain angle—and only then—"has all the vivid exquisiteness of an old ivory carving." For the present, the Real Stone Face is on exhibition at the Doré Gallery, London.—*The Echo.*

*Shutter Speeds.* The first point which I desire that readers should bear in mind is that there is an enormous variation in shutter speeds. Thus a roller blind focal plane shutter may work at 1/100 to 1/1000 of a second. 1/400 is a frequent speed, as, with a fully bright light, at F/5.6, using an excessively rapid plate, it is found that a well exposed negative results. The writer has several such, taken by himself, depicting horses jumping over hurdles, which—apart from the speed marked on the indicator—could not have received a longer exposure than 1/350 of a second. But the ordinary snapshot is usually taken by sensible people in about 1/15 of a second—*i. e.*, this exposure is twenty times as much as in the former instance.

Let me here interpolate that excessively short exposures are as needless—and sometimes as foolish—to indulge in as are excessively fast plates. With very quick shutter exposures one is apt to get "arrested motion" rather than a "living pose." There are not many things, the motion of which the eye can follow and locate, that cannot be caught in about 1/25. With a few exceptions, all are to be caught in 1/15. Certainly, the most realistic and pleasing photographs are those done with an exposure which does not exceed the last mentioned. Anyhow, most of the ordinary lens shutters in use do not work at more than 1/25.—Hector Maclean, in *Scraps.*

Trade- Mark.



**Actien-Gesellschaft für Anilin-Fabrikation, Berlin S.O.**

Photographic Department.

Manufacturers of the patent Developers

# Eikonogen

**Eikonogen** produces a negative of **ample density, full of detail** and **gradation,** but with a **peculiarly artistic** and **soft effect,** thereby avoiding a harsh picture, even when development is forced.

**Eikonogen** is on this account **particularly adapted** to **Portraiture** and **Pictorial Architectural Photography,** especially when the lighting of a subject is unavoidably strong in contrasts.

**Eikonogen** produces the most pleasing results from snapshots or flashlight negatives.

# Diogen

**Diogen** is a **handy, efficient,** and **elastic developer,** which has found much favor in America owing to its adaptability.

| Prices of | 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|---|
| Eikonogen / Diogen . . | $ 0.37 | 1.20 | 2.10 | 3.95 |

## ☞ EIKONOGEN, ready for use, in Cartridges or Glass-Tubes :

Per box of ten, giving each 140 cc Solution $ —.95.

**N.B.** **To Tourists** and others these cartridges form a **simple and reliable method of making up a developer ready for immediate use,** each simply requiring dissolution in five ounces of water. **Note the quantity of solution made when comparing prices.**

**Pamphlets on Developers free on application through all dealers or importers.**

**Sold by all dealers.**

RODINAL

AMIDOL

IMOGEN

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

FA 6615.545

PRICE, 30 CENTS.
Vol. XXXVIII. ✣ ✣ ✣ No. 538.
OCTOBER, 1901.

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.

PRACTICAL ADVERTISING. By Charles P. Marshall . . . . . 377
GLASGOW PHOTOGRAPHERS. By A Special Correspondent . . . . . 380
SELF-RELIANCE . . . . . 385
WORKING UP FOR "COPIES." By Robert Melville . . . . . 386
ABOUT ASSISTANTS. By Paul Clare . . . . . 388
THE DEVELOPMENT OF A DARK-ROOM. By C. H. Bothamley . . . . . 389
THE CONVENTION OF THE PHOTOGRAPHERS' ASSOCIATION OF NEW ENGLAND. By Charles W. Hearn . . . . . 393
THE PICTURES AT THE DETROIT CONVENTION. By Will Armstrong . . . 395
THE AGFA-REDUCER. BY Professor R. Namias . . . . . 397
CHILD PORTRAITURE . . . . . 398
DARK-ROOM ILLUMINANTS. By A. D. Pretzl . . . . . 399
ECHOES FROM THE DETROIT CONVENTION . . . . . 401
SAVING A LIVING. By R. H. Moss . . . . . 404
WHO CONTROLS ONE'S PHOTOGRAPH? . . . . . 405
MINIATURES. By Carine Cadby . . . . . 406
THE LONDON PHOTOGRAPHIC SALON . . . . . 408
REPRODUCING FAMOUS PAINTINGS BY PHOTOGRAPHY . . . . . 409
HINTS FOR THE DARK-ROOM . . . . . 410
AN IMPORTANT ENGLISH COPYRIGHT CASE . . . . . 412
NEWS AND NOTES . . . . . 415
EDITOR'S TABLE . . . . . 416

OUR PICTURES:

A New Portrait Style and Eight Engraved Supplements from Photographs by Frank G. Schumacher, Los Angeles, Cal.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

There are many photographic journals; some of them are better—more useful—than others. But no photographic journal published gives the practical photographer so much new and useful information about his daily work—its methods and manipulation, its business and its artistic possibilities as WILSON'S PHOTOGRAPHIC MAGAZINE. Take this number as a practical demonstration; compare it with any photographic paper published anywhere, and you will agree that WILSON'S is incontestably the best of trade journals for the photographer who wants to know and to grow.

Three dollars paid in advance will bring you twelve numbers of the *Magazine* as good as this. Where can you get better value for your money? One dollar for 4 months. Current number 30 cents.

---

EDWARD L. WILSON

287 Fourth Ave., New York

A CONVENTION PORTRAIT
By FRANK G. SCHUMACHER

Facsimile, showing the completed portrait as delivered by the photographer, on deckle edge rough paper, print masked and centre sunk so that the depressed portion is smooth and the outer margins rough

# WILSON'S PHOTOGRAPHIC MAGAZINE.

[illegible]

[illegible]

## PRACTICAL ADVERTISING.

The Kind [illegible]

[illegible]

[illegible]


## Our friends

FREQUENTLY CONGRATULATE us upon our achievement in the [illegible] side of portraiture.

Seventeen years roll by quickly enough when devoted to the fascinating vocation of "picture making." And while we have received a generous share of medals and certificates of acceptance from the world's important [illegible], yet more gratifying still, is the *steady, [illegible] public* that persist in portraits by

COURTESY & CO.

Can't we make an appointment with you? Sittings any [illegible]



WE HAVE [illegible]

[illegible] years [illegible] photographs are the [illegible] We've got the [illegible] trade in [illegible] who has [illegible] [illegible] will think of [illegible] their pictures [illegible]

[illegible]


[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. OCTOBER, 1901. No. 538.

## PRACTICAL ADVERTISING.

### The Kind That Brings Business.

BY CHARLES P. MARSHALL.

TALK NO. 2.—CONTINUITY.

BEFORE proceeding with this topic let us look at the following ads, illustrating the text in TALK NO. 1.—WHY ADVERTISE?* Viz.—"Not in a conceited tone," etc. [Owing to lack of space these were omitted in the September number.]

Right way.

**Our friends**

**FREQUENTLY CONGRATULATE us upon our achievement in the *art* side of portraiture.**

**Seventeen years roll by quickly enough when devoted to the fascinating vocation of "picture making." And while we have received a generous share of medals and certificates of acceptance from the world's important salons, yet more gratifying still, is the *steady, appreciative, art-loving public* that persist in portraits by**

**COURTESY & CO.**

**Can't we make an appointment with you? Sittings any day**

Bound to bring business.

Wrong way.

WE HAVEN'T BEEN

in the picture business seventeen years for nothing! Our photographs are the best on earth. We've got the dandiest trade in town, and no one who has got an ounce of brains and can tell good stuff will think of having their pictures made elsewhere!

GRUFFY & GROWLER

Photographers

Sure to drive away trade.

* September number, W. P. M.

The soundest sentences ever written on *continuity* are the wise words of Nathan Fowler, one of the world's most *experienced* and *practical* promoters of publicity. This undisputed authority says:

> "In continuity is strength;
> In disconnection is failure."

The strength of nature is in the continuous force of it.

The fundamental principle of motion is everlasting.

The biggest fish are in the brook that runs on forever. The brook that dries up this month and is a torrent next month is unhealthy, unsightly, and but a transient drain-pipe. The strength of its torrent is offset by its periodical dryness.

The man who feeds his horse on Monday and gives him nothing to eat on Tuesday may have a weak horse on Wednesday and a dead horse on Thursday.

If some imbecile should come out of the unthawed North to preach the doctrine of continuous change of business base, or habitual renovation of interior arrangement, the business men would take him gently by the hand, lead him into nature's solitude, and leave him there.

The child who goes to school on Monday, skips Tuesday, and attempts to connect Monday's lessons with Wednesday's studies, is handicapped by conditions diametrically opposed to progressive education.

The merchant who pulls down the top of his roller-top desk, with everything done and nothing to be continued, has no right to be a business man, because there is no business in him.

Never to be finally finished is a rule of progress.

This world is for workers, that there may be no shirkers in the continuous by-and-by.

Let the writer present a personal reminiscence. Before him for many years was the regular, beautifully engraved calendar of an insurance company. For years he did not realize the necessity of insurance. When he became a man he went directly to that company and took out a policy. The name of that company, by long association, had become engraved in his memory. He did not appreciate that advertisement as an advertisement. He did not realize that it influenced him until he wanted insurance, and then that company received some of his money.

Some men succeed by intermittent advertising.

Some men jump off a high bridge and do not get killed.

It is the weakest kind of logic to say that because one man can successfully antagonize the natural laws of success his isolated example is worthy of following.

No business man of sense will close his store every other day, or every other week, or every other month.

The fact that a large proportion of the successful business houses are doing business under firm names of a quarter of a century ago furnishes undeniable proof of the tremendous inertia of continuity.

Ninety-nine per cent. of successful advertisers are continuously advertising. They figure business on the hardest slate with the hardest pencil. They do business for revenue only. They do not consider advertising a luxury. They do not break advertising connection because they do not care to break trade connection.

Trade connection can be broken, and advertising connection can be broken, and the firm can still remain successful. A man can keep his books with the top of a flour barrel for a desk, but the successful man does not. The shrewd business man is not satisfied with the minimum of success. He is forever striving for the maximum of success. Sometimes he cuts expenses; but when he does he cuts harmoniously, and not all in one place. He does not stop advertising. He advertises a little less.

Experience, backed by the law of general averages, proves that the first appearance of an advertisement does not bring business or even create much curiosity. The second appearance does little else than suggest attention; the third may mean business, and the fourth may mean more business; the fifth impresses the reader, and the sixth is felt by the advertiser.

The man who expects his advertisement to bring business or create comment immediately is as foolish as the man who finds fault with the water because it does not boil as soon as he starts the fire under it. The strength of advertising is in its latent power.

To discontinue advertising is to destroy a large proportion of the preliminary education of the possible customers who are beginning to feel its influence.

Few people buy anything the first time they hear about it.

The occasional appearance of an advertisement may have less effect upon the reader than the punishment of a child by one blow a week until the allotted strokes have been administered.

An advertisement in the paper to-day and out of the paper to-morrow, in the next day and out the day after, breaks the reading connection. The public sees an advertisement in to-day's paper and temporarily forgets it. It thinks about it to-morrow and looks for it then. Yesterday's paper is lost and the latest paper does not have it. The public forgets again, and no merchant ought to allow any of his possible customers to forget him twice.

Good, healthy seed may have been sown in fertile ground and the Sun of Publicity put out before it had a chance to root. The ground closes over and has to be ploughed over again—and renovation costs money.

There is not a solitary case where intermittent advertising has brought returns compared with that from continuous advertising. It is the everlasting pounding away at the public, day in and day out, with something fresh every time, or old things freshened, with the same space, or some space, in the same place.

Because a few advertisers have made, once in a while, occasional advertising pay, there is no reason why exceptional methods should be considered. An unseaworthy ship may survive continuous trips and profits pile up, and the ship may go down empty, but only the fool risks his goods in a wornout vessel.

Not the success of the wrong way, but the success of the right way is the way that points on to success.

The continuous advertiser gets the bulk of the business because others are not advertising and he is.

Disconnected advertising is as bad as a disconnected lecture.

Think of a speaker talking for half an hour and stopping in the middle of a sentence and beginning a week afterward where he left off.

Would you hire a carpet-layer to put down one strip of carpet a day?

It is absolutely necessary to connect the advertising periods, and much cheaper to connect them with continuous advertising than to do the extra amount of advertising, after the break, to make up for the break.

A man starts in with a four-inch ad, runs it two months, then stops it two months, then begins with the same ad again. Now, half the strength of the first two months' advertising is lost and will take two months' extra advertising to connect the new with the old advertising. Remember, the readers have had a chance to forget, at the expense of the advertiser. To a certain extent he must begin all over. It would have been cheaper to have run a small ad during those intervening two months. The connecting advertisement, even though a small one, gives the advertiser the advantage of being a continuous advertiser, and prevents the reader from forgetting him.

Outside of necessities three-quarters of everything purchased is purchased in the mind of the purchaser from a week to six months before the purchase is made. The buyer may not realize this; he may think he is buying on the spur of the moment, because he does not take time to think out his motives and, therefore, does not admit that he began to think about buying long before he made the purchase.

Does not the man who wants a furnace consider its purchase long before the actual transaction? Yes! and women have their sealskin coats purchased, in their minds, even years before getting them. But, mark you, the merchant who has kept them interested in sealskin talk all this time is the one who will get their money.

Again, look at furniture; very little of it is bought on the impulse. Most of it is considered and reconsidered long before purchased.

Practically all things, even some necessities, are purchased after consideration.

It is continuous advertising that impresses the public with the stability of a firm.

Further, it is continuous advertising that keeps alive the flame of desire and focuses its light and heat on the shop of the advertiser.

In every country the continuous advertiser is a successful advertiser, and experience plainly suggests that it is safe to follow successful practice, and much more safe than to trust to successful exceptions.

When we see men building gigantic plants and making millions of profit, all the while advertising, never letting their names drop from sight during seasons of selling and seasons of quiet, we feel convinced that the advertising that pays is the continuous kind, or that the continuous kind is the advertising that pays.

Many a merchant and professional man has considered the advisability of discontinuing his advertising during the dull season, but when he confronts the fact that the successful advertiser does not do so, he accepts accepted principles and keeps on advertising, knowing that so long as the strength of everything, from love to politics, is in continuity, so long must the good of advertising be in the constant, never-let-up method.

Remember, the principles of advertising are the same in all lines. The well-proven rule of continuity is just as essential to the photographer as to the merchant or manufacturer.

## GLASGOW PHOTOGRAPHERS.

BY A SPECIAL CORRESPONDENT.

"GLASGOW," says a guide-book, "is the second city in the whole of the British Empire," and then the same book more than hints that excessive modesty is responsible for the statement; for in reality the aggregation of towns and hamlets forming London is in no sense of the word one city. All of which may be respectfully submitted to Chicago. Whatever its relative size and importance, Glasgow is a great place, and just at present it is enthusiastic over an International Exhibition. Said a policeman to me, "It's the biggest exhibition that has ever been held—anywhere. It's a lot bigger than our own held in 1888, and it's bigger than anything London has ever shown." "What about Chicago and Buffalo," I asked. "Weel, the Americans have some fine shows, but"— still he believed in Glasgow's pre-eminence.

The origin of this exhibition is chiefly due to the fine arts, and it is therefore fitting that photography should be well represented at it. Not only is there a fine collection of pictorial work; there is also a display of professional work by the leading men of Glasgow and its suburbs.

There are some good photographers in London, but, as I showed in a previous letter, some of the old-line men in the metropolis are doing very mediocre work; and there is not a little justification for the frequent statement that the best work is done in Scotland.

The professional work which is here shown represents a dozen workers. It is hung in the circular corridor surrounding the large hall in which the entertainments are held. This corridor is about ten feet broad and eight feet high. Its outer wall is glass, to enclose it from the weather, and as the pictures hang on the inner wall facing this, they suffer a little from reflections. The whole of this inner wall is panelled for thirty inches from the floor with a plain veneer of green wood—very simple and very charming. Above, up to eight feet, where a canopy roof of gray canvas commences, are set the exhibits. In each case the space has been allotted, and the arrangement and decoration then left to the photographer. In every case he has devoted considerable care and some expense to these details. A professional craftsman would seem to have been employed in most cases, and the whole thing is in a quiet, restful key—good work, but not aggressive, as though the panelling and the gray canvas gave tone to the whole.

I commenced at one end of the collection, with the commendable intention of working through it, man by man, but soon found myself roaming from one exhibit to another, making random notes; and in somewhat similar style I will describe the work. And where the general average was so good it is necessary to miss some, for it is of little value to repeat eulogies.

Commencing with the first display, I came to the work of a veteran in the craft —John Fergus, of Largs. Fergus has been a known man for many years, and is one of a small body of men whose work years ago led many wealthy English people to defer visiting a studio until they went north to Scotland.

His work, as shown here, is typical of the country, in that it is thoroughly solid and painstaking. There is no glossing over difficulties, and the results, whether they "appeal" or not, certainly command admiration. For Fergus has made a specialty of large groups "at home," with all the inherent difficulties of posing ten or a dozen people in a (studio) drawing-room. Such results at best can never rise higher than good commercial photography, and that is what we are at present interested in. There is evidence that these negatives were made probably ten or fifteen years ago, and whether the work is still attempted, or whether its financial returns were ever commensurate with the difficulties, I do not know. But I should not be surprised to learn that other work paid better. His sitters are placed in one-half of a large double parlor. Folding doors there are none, nor have been, but the double room is indicated by the spring of an arch appearing in some of the pictures or by the heavy curtains festooned from the arch. There are two large windows to this room, one at each side, with Venetian blinds drawn down, and hung with lace and damask curtains. One of these windows may be hidden by the close drawing of the curtains, or by placing a tall oak cabinet before it. The windows are not used for lighting any of the figures. The main accessories are a harmonium close to one wall and a small card-table near the opposite side of the room. These give the key to the general arrangement. The party is usually divided into two groups—pyramids, more or less. One is seated at the harmonium, one may turn the music leaves, and one or two others gather round. If there are babies or young children an elder sister or young aunt may sit on a low footstool or on the floor, and connect them with the group. A second group around the table drink afternoon tea, or read, or take a hand at cards. Several others gather round these. The elders of the party may take the table, and grown-up sons gather round.

The lighting, which is very soft, comes from one side only, considerably in front of the group, and often somewhere near the orthodox 45°. Every portrait is a good one, and a sufficient number of the people seem content to be taken in profile. The pictures are large, direct ones, about 20 x 24, and whether a specialty of groups would pay is, as I have hinted, very doubtful; but all photographers have to tackle them sometime or other. His portraits of single figures, with the same studio transformed into a boudoir, are fine technique, and are chiefly interesting as showing how he varies his accessories—his chairs and his rugs. Altogether, if this selection is typical of his work, John Fergus must be a photographer of the wealthy. Every picture of his is framed. There is one of the king, colored and brilliant in a frame of gold, and another colored one of a lady in a frame of ornate gilt gesso on an enamelled green flat. But for the rest the frames are dark. The wall space is covered with green plush, with an extra strip of from two to four inches in width gathered round each frame.

Next to Fergus comes a very small display of small work by Wm. Elsmore, and then comes one of the most interesting of the exhibit—that of Brinkley & Son. This was especially attractive, as I was unacquainted with their work, and as their work was almost entirely of children—of their twenty-two large pictures twenty are children. Very complete is the success with which these little people are handled. The smaller children are busy at their amusements, and the older ones show the frankest delight in facing the camera. They evidently have a healthy pleasure in being taken. I endeavored to sketch a few suggestions for poses, but it was impossible in this most crowded part of the corridor, for mammas and little children jostled me as they commented on the "wee girlie making dollie's bed," or "the girlie sewin' the wee dollie's claes," and after a few failures I gave up the attempt. Brinkley & Son, in these twenty enlargements, are very successful in catching children at their happiest. A glance at these pictures recalls the "crying babies," which used to be so

common, as a hideous nightmare. They show a little girl engaged in making a bed for her dolly, or, with a most delightful air of concentrated interest, intent on threading a needle, or she gravely sweeps the carpet with a diminutive "Bissell;" or, finally, tired of play, curls up asleep in a great chair.

John Stuart has a very small display—six very successful flash-light interiors and six very strong portraits. These flash-lights, which are the only work of the kind displayed, show that Mr. Stuart, the specialist photographer (who has picked up wrinkles when visiting American studios), is as much master of his craft as when he is Mr. Stuart, the portraitist.

Romney has a display of good grade, straight professional work, and next to him, with a very interesting display, is Monapenny. Opposite the main entrance, Monapenny has the advantage of much higher wall space than the others, and he fills it with two very tall cases. One is entirely filled with portraits of elderly men, printed in black platinotype, against a plain black background, and strongly reminiscent of Hollinger's work about the time he came to New York. As a mere technical detail he does not make the mistake of under-exposing his heads of old people. His other frame is filled with portraits of ladies. Three or four of these are small portraits trimmed circular, a rather overdone fashion in Britain; and the rest are an upright panel, most of them toned black. Of accessories there are few, but the darkest of backgrounds shows some slight detail, such as a slight fold in a curtain, or even a palm. All Monapenny's work is unframed, on the white mount, sunk centre, name in black script, which is the present fashion.

I was much interested in work which might be termed more American than Scotch, but was unable to meet the author of it. I gathered that the name represented a dual alliance of capital and a good operator; and, as rumor had it, that the latter has seceded from the combination, there is some little interest in Glasgow as to how the work will continue. I did, however, get a quotation for cabinet prints, and it read "from $2.50 to $12.50 per dozen."

Next to Monapenny, Langfier, whose work has already been described in the MAGAZINE, has a large display. Both Langfier and Lafayette, whose work is also here, are photographers in several cities, and their work varies with the different degrees of competence of their different operators; and doubtless a more than usually good picture will be useful in more than one showcase. Turnbull & Son again do good work, and they display a sign in polished embossed brass, "Highland costumes are kept at our studio for the convenience of tourists and others wishing to be photographed 'in the garb of old Gaul.'" Here is a hint to the wide-awake American. Why not invest in some feathers, variegated blankets, and paint, and remind us of our forerunners.

The display of W. M. Warneuke is perhaps the strongest shown here. The arrangement of the work, too, is good; but so is that of all shown. This section is divided into ten panels, about four feet high by two wide, by strips of two-inch wood stained black and unvarnished. One panel is devoted half to the name and half to a case of beautiful miniatures, colored. The remaining panels are backed with green fine canvas, the whole being a study in plainness, and very good. Warneuke's pictures are all carefully framed, as are almost all the pictures shown here. G. Comrie Smith floods his pictures with light and gives them a waxy, porcelain-like finish, which doubtless takes.

There is one little lot of work here which is not strictly professional. Willie Anderson shows a dozen 3 x 4 snapshot "On the Road to Mandalay." These, although they do not illustrate a well-known ballad, are scenes in Burmah, and are interesting on account of their technique. Sunny snapshots of dark skin and of white wrappers—and there is not a dense shadow in the lot, nor is there a patch of harsh white.

Taken altogether, this show of professional work is evidence of some very able workers in Glasgow.

Leaving the exhibition, I spent an hour in wandering down Sauchiehall Street, the fashionable shopping and promenade thoroughfare, and where, naturally, photographers are thick on the ground. Romney's work was lavishly displayed by the use of

four showcases in addition to those in the entrance hall. Two were fixed on each side of the street, so that a passer-by could not fail to notice one or other of them. The showcases have been specially made, of dark, oiled wood, to fit the spaces where they stand, and it is evidently somebody's regular task to see that they are kept in order, both as to specimens and general cleanliness. The backing of each case is green mohair, fresh and unfaded, and the glass shines as though it had a daily polish. One case contains twelve cabinet-sized portraits of children printed on matt paper—the English gelatine paper, commonly known as P. O. P. (printing-out paper). Another contains six portraits of women, trimmed to that high narrow oval which a recent fashion in mounts is trying to introduce, and mounted on gray American mounts; for it is a sad fact, from the John Bull point of view, that American mounts may be added to the many things which have invaded the old country. The other two cases contain framed pictures, and the whole four give an idea of the adaptability of the Scotch photographer to different grades of work.

One of the best known firms—the best known, probably, to American workers—is T. & R. Annan & Sons. They have no display in the professional section of the exhibition, but they are the official photographers, and they have a studio on the grounds, where they take portraits ranging from midgets, at about a dollar a dozen, I believe. While on the subject of official photographers I may say that hand-cameras were everywhere in evidence on the ground, and there was no charge for their admission, nor apparent supervision afterward. Messrs. Annan, however, are process-workers—photogravurists—rather than photographers. They do, however, quite a large business in portraiture, and many good things come from their camera when Mr. Craig Annan personally operates. Their windows are more prominently identified with the process department of the business, although a number of cabinet portraits are shown.

Brinkley & Sons line two sides of a narrow entrance passage with warm-toned prints of children. I could not help thinking when looking over this display and round the reception-rooms of Warneuke and Stuart of my remark on Baker Street photographers, that they show a great mass of work when two or three prints only would the better serve their reputations. Here, on the contrary, we see much work and wonder at its consistent level.

The Glasgow photographers appear strong believers in the business value of showcases, and they have a healthy horror of neglected ones. They are fond of planting them in prominent positions, not necessarily near the studio, and of taking good care of them. Lafayette's studio is not in Sauchiehall Street, but here, at the entrance to a national art gallery they have two great showcases. One is entirely filled with their "new process mezzotints." These are mostly portraits of well-dressed women, gracefully posed, and showing good exposure and negative making, and usually an ornateness of accessory to carry out a certain richness of effect. The mezzotint looks like a print on sepia-platinum and then the paper slightly stained in a bath of some kind. The prints are masked, almost the full size of the negative printed, and trimmed with a margin of paper showing. The margin varies according to the size of print—about half an inch at the sides and three-quarters of an inch at the top and bottom of a 6 x 8 print being about the proportion. If the print is signed, it is with pencil on the lower left-hand corner of this margin. The print is then placed on a white plate-sunk mount, and the name of the person may be written in a very plain, formal black script. All these mezzotints are framed, either in narrow bevelled plain black enamelled wood or in a narrow strip of black, plain or reeded, with a fine pattern or spiral of gold inside and out. The other large frame is filled with an entirely different display; brilliantly lighted, much retouched, glossy, warm-toned P. O. P. on dark-green enamel gold bevel, gold blocked mounts.

The standard mount of Britain is at present undoubtedly the white, plate-sunk mount, sometimes with a ragged or deckel edge, and with name and address in black. American mounts are just beginning to make their appearance, and I believe they are being very successfully copied, of course at a lower price (not necessarily lower in quality) by the German makers. But if

the Glasgow custom becomes wide-spread, we shall see mostly framed pictures in the showcases of the next fashion period. This very wise plan was, I believe, due to Mr. Warneuke, who shows nothing without a frame.

Mr. Warneuke's display is in Sauchiehall Street, but his new studio is in a fine old mansion in what must have been an ultra-fashionable quarter not long ago. He has a broad, deep passage leading to his staircase, so broad that it has evidently been made by converting a store. On each side is a deep case or window, in which large pictures can lean against easels. All his work is platinotype or carbon; and while speaking of carbon, there are some very fine workers on this side, both in the photographers' own work-rooms and the trade houses, which are so strong a feature in Britain. Mr. Warneuke is one of the strongest all-round workers in photography on either side of the Atlantic. Were he not a professional he would be a leading amateur. As it is, his "amateur" outdoor scenes are for personal pleasure rather than for publicity. His miniature work is a specialty, both plain and colored.

The question of prices is not the simple one it once was—*vide* Monapenny's cabinet prices already quoted. The best Glasgow work can be obtained—in platinotype, I believe—for about $10 per dozen cabinets. Cheap work can be obtained at $3 per dozen, with a framed enlargement thrown in. Doubtless very cheap work is even less.

Glasgow is a city permeated with industrial art. The very lettering of names over the bakers' shops is distinctive, and evening-class or technical-school art seems to have colored everything. As a result, there is an enormous class who can appreciate and understand good work, such as Stuart, Warneuke, Ralston, and a few others produce. And these men make money, I believe; but they thrive at the expense of the moderate man, I fear. His studio must be deserted, though doubtless the *very* cheap work has its full share of patronage.

There is no photographer in Glasgow who has absolutely discarded accessories, and they are not afraid of tackling three-quarter or full-lengths. So far as showcases and reception-rooms are concerned, they give individual care to their prints, and their use of frames must lead to quite a sale in this desirable line. Miniatures, of course, lead to many sales of frames, and at wonderfully reasonable prices. Where a miniature can be trimmed from a negative from which larger prints are made there is practically no added charge, and for about $30 the daintiest of colored work can be obtained in a very handsome frame.

Glasgow faces a difficulty common in England—an atrocious quality of light in the winter months, which, of course, constitute the season. Everywhere electric lights are installed; but the solution is not considered quite ideal. One man I found experimenting with half a dozen great, naked carbon lights, shining through a screen of muslin and tissue. In Mr. Warneuke's new studio he has obviated one difficult phase of the fog question—fog *inside* the studio. For this studio is built air-tight, and is ventilated by shafts which bring air through patent purifying filters, which take out all smoke and similar suspended matter. This air is ejected from the studio by an electric fan. This is but one of Mr. Warneuke's many conveniences; another is his method of storing backgrounds, which are mounted on light stretchers and lowered into pits in the floor built in the room below. Each background stands upright in its own groove, with light rings for raising it attached to its upper end, and eight or ten grounds are accommodated in a pit about eighteen inches broad.

A feature of the leading Glasgow studios is the small amount of work-room space. Reception-rooms and studio are on a liberal scale, and behind the scenes a couple of retouchers and a girl may be found making prints. At first sight it looks like a skeleton in the cupboard—or a very dull season. But business is fully up to the average of these quiet months, and the explanation is that the workshops are situated outside the town, beyond the reach of Glasgow fog.

On one point the leading Glasgow photographers are unanimous. They consider that the best portraiture is done in Edinburgh—and by William Crooke.

## SELF-RELIANCE.

It is easy enough to get men who will perform their duties in a passable manner so long as the employer, or manager, or foreman is always at hand to be consulted, but to get men who are self-reliant, with sufficient confidence in themselves to avoid troubling their superior with details and matters with which they should themselves be competent to deal, seems to be almost as impossible as Diogenes' task of finding an honest man. It is this lack of the necessary material to form an efficient force for running a business that makes commercial life so hard and so full of worry and anxiety to the heads of concerns; and at no time is one's heavy responsibility so acutely felt as at the holiday season. To many a man the taking of a fortnight's holiday means work and worry on his return, simply because his staff are deficient in self-reliance, and, lacking his guidance, have either shirked difficulties or have blunderingly created new ones.

In large businesses which are well organized and split up into departments the absence of the principal or the head of a department is perhaps not so acutely felt, though it is none the less true that a conscientious man holding a responsible position cannot stay away from his desk for a lengthy period with any equanimity of mind. Human nature is so constituted that each rank of life looks for guidance to the one above it; and this habitual dependence on one another is probably the cause of the general lack of self-reliance in the character of the employed classes of to-day. It seems impossible to get men to think what is the best way of doing a thing, or the best compromise of a difficulty that cannot be solved. Take a general case: The morning's mail brings a letter of complaint from a customer respecting goods delivered or work done. If you hand the letter to the average man about your place to deal with it, it is a hundred chances to one that the first remark he will make is, "Well, what are we to do?" or something to that effect, which will be followed up with some such remark as that, "This fellow is a regular nuisance, always complaining about something. I don't know what to do with him. I haven't time to attend to all his fads," etc. Then the wearied principal or manager has to turn to himself and investigate the customer's complaint, with the result that he finds it is a perfectly reasonable one, which can be put right by some very simple act or explanation. An exchange of goods, a courteous letter, or a few words over the telephone, or a personal call, and things go smoothly again. Here, perhaps, it was want of self-control rather than of self-reliance or self-confidence—we mean that kind of self-control which makes a man bear complaints with patience and try to look at matters with a judicial spirit. But the man who can meet troubles in a philosophic spirit will not be wanting in self-reliance.

Again, how often do you find, if you send a man to report on some difficulty, he will come back and say the job is hopeless and nothing can be done. Eventually you have to go yourself, and find the "way out."

There is an unmitigated senselessness in the majority of employés, and especially among the younger ones. Men begin to think too late in life, when they have been buffeted about in the world and had all their corners knocked off; and then often the thinking takes the form of the bitter reflection that they have missed their opportunity in life, and that it is now too late to start again.

If boys could only be taught to reason the best way out of practical difficulties, we should soon have self-reliant men. We seem to need a "science of difficulties," with professors to teach our boys the "way out," or at any rate to infuse into them the spirit which will cause them to shout, "Hurrah, here's a difficulty; let's find how to get out of it." Unhappily, we seldom meet with people who can encounter difficulties with cheerfulness; it is far more likely that the youthful aspirant in business will say to himself, "I can't make head or tail of this thing; perhaps Jones will know or Brown might do it."

We seldom get men who will say "nothing is too difficult," or "what man hath done man can do." Perhaps it is that life has become too easy in these days when everything is done for us; boys want to continue being "fed with a spoon" until they grow up to manhood, and even until they pass into senile old age. In spite of free education and technical education, which may be had for next to nothing, they won't learn because it is too hard, too much trouble, takes too much time, so they say, but actually because they find it is so much easier to go and ask someone who knows whenever the occasion arises. You cannot get boys to learn a trade properly nowadays, the apprenticeship system is a dead letter, and the labor market is flooded with young men of from twenty to twenty-five years of age who have never learned their business thoroughly enough to command a situation in it. They have grown out of boyhood without becoming men in the true sense of the word. They are tolerated as boys, but as soon as they ask for men's wages they are turned off and sent adrift into the already flooded labor market. A few realize their position and make a strong effort to improve their knowledge and better their position, but the majority drift with the stream, catching at straws and floating by some means or another for a little time, and eventually sink in despair.

It would seem that men must ever be divided into two classes—those who are content to yield to circumstances and those who are persevering to control the circumstances around them. The latter are the self-reliant ones who have learned that it is impossible to get rid of trouble, even if you traverse the whole face of the earth, but who have also learned to bear troubles and difficulties bravely, living down annoyance and disappointment, and taking lessons from adversity.

We can only repeat what has been said over and over again by many different writers for centuries past, that the way to become leaders of men is to be self-reliant, not trusting to others for help and advice, but having self-confidence and perseverance enough to pull through and over every difficulty. There is no difficulty, however great, but will yield to steady perseverance, industry, and patience. You can't lead if you have to wait to ask for advice. You may make mistakes by relying on yourself, but it is better to do that than to make them by relying on others. It has been well said that the man who never made a mistake never made anything. Ability, enterprise, and industry will redeem many a fault. To fail in a good attempt is no discredit, and to the self-reliant man it is a spur to renewed efforts to accomplish the right thing.—*Penrose's Process Work.*

## WORKING UP FOR "COPIES."

BY ROBERT MELVILLE.

I WAS recently asked by some friends to recommend a photographer who could be trusted with a couple of glass positives—dating from the early fifties—for the purpose of making copies. I pointed out that almost any photographer could undertake the work, for the portraits were in very good condition; but they wanted to know who was the best man. I named a well-known photographer in whose reception-room I had seen some enlargements of daguerreotypes; "but," I added, "you will pay a stiff price for them."

I learned afterward that my suggestion had been taken, and that the copies, both as cartes and enlarged, had given every satisfaction, and I took the first opportunity of going for that photographer as to his method of working. He persisted that there was no secret whatever in the matter, and that careful work and a somewhat dexterous and steady hand accounted for his success. "But," he added, "I will give you one obvious hint. It is usually well to print a copy on paper which resembles as closely as possible the original. For instance, though my work may be classed as entirely carbon or platinotypes, I seldom use these papers for copies. I use single albumenized paper—which I keep in stock and sensitize myself—for all prints from originals on similar paper; in fact, I try

for a *fac-simile* of what the picture itself was when new. This, of course, does not always apply to pictures very much enlarged and intended to hang on a wall, though they are generally handled with an intention for a similar effect."

He turned to a cabinet and from a drawer took a small tintype. Tintypes pass through many vicissitudes, and this one had had more than its share. It had originally been of three persons, but two of the portraits had entirely vanished; the third showed the outline of an old "spoon" bonnet of thirty years ago—something like, in front view, the headgear of a female Salvationist of to-day—and it showed very little else. With a glass I could see a suggestion—no more—of the features. "That," said the photographer, "is the mother, long dead, of one of our multi-millionaires, and it has brought me an order for half a dozen of the highest-priced enlargements I have made, beside smaller pictures."

He was quite right when he said that he worked without any secret method, and he outlined "how it is done" for the benefit of the fraternity, at the same time persisting that every photographer knew the manipulations, and would at most merely require a hint of the special method followed. Two things only he emphasized. First, he pointed out, although he was a high-priced and fashionable up-to-date photographer, he found the copying business not only interesting to him but also directly and indirectly profitable. (Perhaps it was because he found it interesting work that it proved profitable.) Second, he said, the greatest mistake of too many photographers was that they did all retouching and working up on their negative, or on a copy from it, instead of doing it on the original itself. He condemned all attempts at any *chemical* manipulation, except as a last resort, and laid stress on the advisability of practice on some originals of little value before undertaking to tinker with pictures priceless to their owners.

The tintype is perhaps the most exasperating picture that comes into the studio, for it is taken "anyhow," in any light, often underexposed, and until, perhaps owing to a death, it becomes valuable, little care has been taken in the keeping of it. It comes to the studio sometimes battered and buckled in the most hopeless fashion. If much bent it may be laid, face downward, on a soft pad, and carefully flattened by passing a roller—a bottle will do—repeatedly over it.

It must ever be borne in mind that most portraits sent to be copied have a very special value to their owners, and there must be no possibility of injuring or destroying them. But with a little water-color used for spotting, a little gum-water, and a few brushes, all the necessary work may be done, and in such a way that it can be washed from the picture and leave no trace.

In preparing a tintype for copying, the usual troublesome question is the relieving of a heavy blackness, and the question resolves itself into one of working-up. White, just tinted with spotting color for the features, can wonderfully remodel the face; touching very gently the eyes, the lips, the curve of the hair, with a fine touch as though retouching. The folds of the coat, buttons, etc., may be more boldly indicated, and force put into the whole picture by a few minutes' careful work. It is at this stage that all blocking out should be done. This is usually done on the reproduced negative, and, unless done by a very steady hand, leaves a strong suggestion that the finished picture has been cut out with a pair of scissors. Use Chinese white liberally, graying off a little around the margins of the figure, and if carefully done the final print will show a much softer margin than if this work were done on the negative. It is quite feasible at this stage to suggest a background, indicating a fold of curtain, a window, or what-not. A glass positive or a daguerreotype may be treated in much the same way, suppressing or strengthening with Chinese white or with spotting color. If the glass positive is varnished, a wash of gum-water over the hands and face, followed by a few touches of white before the wash dries, will be useful. Any cracks or flaws can be relieved, and when the work is done by a light, careful hand, the result will photograph very effectively.

Where it is possible to use oil-color on an original—oil-color can the more easily be handled in yielding gradations—it should

be thinned with turpentine only, as it will then dry with a minimum of gloss and make the subsequent copying easier.

The old faded albumen paper print is a terror to copyists. The old photographers were fond of using a white background in vignettes, and this white paper has gone yellow and is of a color with the cheeks and hands. In such a case, after working up the features, an added background, either plain or clouded, will often give relief; if the print is badly yellowed it may be a good plan to place it behind a pale-blue glass, to the improvement of the negative.

The print may either be placed behind the blue glass in a printing-frame, or the glass may be placed before or behind the lens, and often it makes a great improvement.

Copies are often considered as a necessary evil, and perhaps some photographers consider that time spent on them is time wasted.

But copies usually give a more permanent satisfaction—or the reverse—than any other class of work, and it is no disadvantage to a photographer to have the reputation of being a skilful copyist.

## ABOUT ASSISTANTS.

BY PAUL CLARE.

At the time of the Dewey parade in New York I was waylaid by an enterprising photographer who wanted to "rush" some photographs of that interesting event into the market. He felt sure that if he could be selling prints—big prints—the next morning, he would coin money. And he wanted me to turn in and help at an all-night seance of printmaking! I suppose I must be easy-going, for I consented, and at about 10 o'clock at night I turned up at his studio. He had about a couple of dozen of 10 x 12 negatives, and a few larger ones, and my share of work was to assist an assistant in making Nikko prints. He did the brain work, deciding on the exposure and developing the prints, while I changed the paper and gave exposures as per instructions.

One negative I remember in particular; it deceived both of us. He told me to give two minutes' exposure under our electric lamp. I ventured to suggest that the time was slightly too long. But I made the exposure, and the print flashed up to soon. Then I tried a minute and a half, a minute, and thirty seconds, all per instruction; finally, in desperation, I gave ten seconds, and the print was not far out. We made half a dozen of it with twelve second exposures. Now this happened to be one of the 12 x 15 negatives, and half a dozen sheets of 12 x 15 Nikko paper cost money. Another habit of this assistant was to use a generous quantity of developer and endeavor to make it work for at least half a dozen more prints than it could satisfactorily do—a most misplaced economy. Altogether, when morning came and we totalled our results, we rejected at least one-third of the prints, and only accepted the two-thirds, not because they were perfect, but because, under the necessitous circumstances, they would "do." The large percentage of wastes did not seem to trouble anyone. They were put down to the exigencies of rush; I felt they ought to be put down to rule-of-thumb and incompetence.

If the total value of merchandise *wasted* in a year could be paid to a central fund there could be provision made for pensioning every worn-out photographer in the country. It is not a matter of a cent here and there, not a mere matter to vex a parsimonious soul; it is a matter of dollars. But this is new talk, and I must not wander off on side tracks. I am speaking of and to the assistant. Only I fear I shall reach the wrong assistant, for the one who knows enough to read his Magazine is probably the one to whom my scolding does not apply. It is said that the assistant question is one of the crying abuses of photography. It is as much a matter of regret and of, shall I say, disgrace as is reckless price cutting or bad business management, but it is a question little spoken of; for whereas the master photographer cries out at heart and endeavors to amend

it, the assistant ignores publicity, and suffers in silence. Of the spots on the assistant question, two of them are Sunday labor and the uncertainty of employment. The former he shares with the workers in many another trade; of the latter he has, I think, much more than his share. Every thoughtful man regrets this, and many photographers worry over it as much as their assistants do. But it is impossible for any outsider to remedy affairs—regeneration can come from the assistants, and from them alone. I believe many master photographers will indorse me to the hilt when I say that the chief trait of the assistant, in their eyes, is his incompetence. How many there are who only tackle one branch of work; they are printers, *or* developers, *or* retouchers; and where they are all-round men it often means that they have enough smattering of all to blunder through as general help in some small gallery. It is the story that is met within every business—the difficulty of getting men who are willing to meet their employers half-way in an effort to improve their positions. I remember several years ago a well-known photographer advertised rather widely for an operator. He stated the wages, and they were very good wages. As a result he had, through the mail, somewhere about 200 applications, and out of these 200 he could only select *four* as sufficiently possible for a second thought. And five actually forgot to sign their names, and at least a score forgot their addresses.

There is more money and more regular payment in being a motorman on a street car than in being an incompetent assistant. But there are berths open, and always will be, for the man who thoroughly understands his work. There is a mistaken notion that a photographer must push his man forward and give him a chance; it is for the man to push himself forward and to force the chance. He must work with an eye beyond going-home time at night or wage day at the month's end. He ought never to be content with his developing until he understands all the intricacies and delicacies of his work. If he has a certain percentage of waste in his prints he ought to know just how far those wastes are unavoidable and how far they are the result of carelessness or inexperience. There is an accursed notion in the minds of some assistants that it is possible to do too much for the boss. The man who dreads doing too much for the good of his employer ends by doing too little for his own good.

One of the strongest features of a photographic establishment is a healthy *esprit de corps* between employer and employed. With this the work-room goes like clockwork, without it everything runs out of gear. The man who does "too much" for his employer is soon found to be the useful man. Just think of it: instead of the assistant being fearful that he may lose his work, the boss is fearful that he may lose his assistant? Is not such a happy state of things worth working for? It can be attained by working for, and then, if the boss is unreasonable, or if things don't run smoothly, it will be as easy for the assistant to get a new place as for the boss to get a new man. And such should be the case in all healthy businesses.

There are always incompetent assistants; there always will be; and there are always those who are temporarily out of luck. But there is always a way out of the mire for those who are willing to use their brains and to learn. Solid, thoughtful work has brought its reward since the beginning of time, and will do so to the end.

## THE DEVELOPMENT OF A DARK-ROOM.

BY C. H. BOTHAMLEY.

DEVELOPMENT in a dark-room is a familiar topic, but the development of the room itself as regards its arrangements and appliances—the things that have been tried and found wanting on the one hand, and on the other the things that experience has shown to have an enduring value—is a less hackneyed subject, and may at least provide a few useful suggestions. Although in photography, as in everything else, each of us has to learn by his own experience, we may at times profit by the good or evil

fortune of others, and turn to our own account the experience for which they have paid.

The ideal dark-room is one in which work can be quickly carried out with the maximum convenience and with a minimum loss of time in making preparations, whether the batch of plates to be dealt with consists of two or two hundred. Of course, if the room must also be used for other purposes there is always the trouble of "getting ready," and a great nuisance it is when only two or three plates have to be developed. I shall, however, assume presently that the room is devoted exclusively to photographic purposes, and is or can at once be made "safe" as regards external light, even at midday.

My first dark-room, like that of many other people, was just an ordinary room with the usual jug and bucket appliances for water and waste; but I soon found that where work has to be done under these conditions much time and trouble can be saved by having a box divided into compartments, with wood or corrugated paper, or both—one compartment being long, for holding the dishes standing on their edges, and the others square or round, for holding the bottles and measuring glasses. Everything can then be carried at once to the table on which the work is done, and can be packed away easily and quickly.

Next followed the use of a scullery adjoining the kitchen; and this was by no means to be despised, although it did afford experience of the disadvantages of a low sink and the demerits of sandstone as a material for sinks used for photographic purposes. If such a place, or, what is much better, a china pantry with water supply and sink, is used, the divided box just described is convenient; but it is, of course, an advantage to have a cupboard, which may quite well be a hanging cupboard that can be locked up. Failing this, a shelf, or a row of shelves, such as are sold very cheaply for bookcases, will answer, but they should have some arrangement for preventing the improper removal or use of the bottles. The simplest and on the whole the best device for this purpose is a fairly broad bar of wood pierced at each end by a small slot, which fits over a staple driven into the front edge of the end of the shelves, and can be secured by a small padlock. One end of the bar may be cut into a tenon, which slips into a broad staple fixed vertically, while the other end has a slot which slips over a smaller staple, and in this way only one padlock is required. Whichever plan is adopted, it is important to observe that the bar must be fairly broad and must be close to the bottles, and the latter must not be much shorter than the space between the shelves, otherwise it will not be difficult to remove the bottles even when the bar is in position.

Third in order came a large room (forming part of a college building) provided with a large sink of wood lined with lead, extending at either end into a firm table of the same height. This room served to convince me of the great advantages of a sink of this kind, while it also showed that for purely dark-room purposes there is no real advantage in having a very large room; and from this point of view the much smaller room that I now use is quite as convenient.

Afterward I had, by force of circumstances, to use a small room, the sink in which, though large and convenient, was of glazed earthenware, and it taught me a great deal about the disadvantages of that somewhat popular material.

My present dark-room was formed out of the scullery of a medium-sized house (which serves as my office), while the kitchen, which adjoins it, has been turned into a laboratory. This scullery is not large, and measures only 9 feet 6 inches by 7 feet, but it is quite large enough, and indeed the actual working space, inclusive of that occupied by the door, is only 7 feet by 5 feet 6 inches, the remainder of the floor space being kept free, so as to be available for special work.

It may be of interest if I say that, in my opinion, a floor space, 8 feet by 6 feet, is sufficient to provide a convenient dark-room for one worker, assuming that it is fairly lofty, and that proper means are adopted to secure sufficient ventilation. Of course, such a room will not provide convenient space for making enlargements by either daylight or artificial light.

I find it decidedly the best plan on the whole to keep the window of the dark-

room blocked up, using for this purpose a wooden frame, covered with two thicknesses of American cloth, with thick, brown paper between. This frame is kept in position by turn-buttons, and a lining of felt to the woodwork of the frame secures a light-tight joint against the woodwork of the window. When white light is wanted inside the room, it is easily obtained from the gas bracket, and in any room not provided with gas an ordinary lamp would obviously do what was necessary.

In arranging the room I had not quite a free hand with respect to the position of the water supply and sink, and this affected some details, to which reference will be made later.

*The sink* is of wood, lined with lead. The best wood for this purpose is probably elm, but sound deal answers quite well. What is known as "4-pound" lead is thick enough for the lining, though the plumber, for reasons of his own, will probably advise you to have "6-pound" lead. It is important that the lead should be thoroughly well beaten down, so that it fits properly into the edges and angles of the sink, and it should be turned over the top edge of the wood-framing and fastened down with *copper* nails. Such sinks can be bought ready made in various sizes and at moderate prices. Mine is 30 inches long by 20 inches broad and 5 inches deep, and admits of two whole plates being developed at once, while of course it can be used for the development of enlargements of considerable size. The waste-pipe, properly trapped, is in one of the back corners, and the water-tap projects over the sink about six inches from the back and midway between the ends. Two water-taps are a distinct convenience, and may be carried on a T-piece with nine or even twelve inches between them.

On the mouth of the tap is a piece of india-rubber tubing, about three inches long, which not only helps to prevent splashing, but also reduces risk of damage from bringing a negative into contact with the end of the tap during rinsing operations. Further, a piece of glass-tube (with the edges of the ends rounded off by holding them for a time in the flame of a Bunsen burner or a spirit-lamp) can be inserted in the india-rubber tube when it is desired to lead the water into a dish or other vessel standing on the bottom of the sink. The lower end of the glass-tube has a short piece of india-rubber tube slipped over it also.

Resting on the top of the sink and of the same length is a wooden grating, eight inches broad, formed of rods of wood, half an inch square in section, halved into cross-pieces of similar wood, and fastened together with copper nails. Cross-pieces close to the ends prevent the grating from slipping, and so falling into the sink at one end. The grating is made of deal and has lasted for years, though teak would perhaps be better. It supports dishes, etc., during development, while readily allowing any spilled liquid to fall into the sink. The height of the sink has considerable influence on the comfort of working, and, assuming that most of the work will be done standing, the proper height is found in the following way: Ascertain the height of your elbow when you are standing, and make the top edge of the sink three inches lower than that.

The great advantage of a wood sink, lined with lead, is that it so much reduces the risk of breaking negatives, etc., that are allowed to drop—and we are all butter-fingered at one time or another. A negative dropped from even a small height into an earthenware sink will most probably break, while with a lead-lined sink it is just as likely to escape fracture. Some people object that a lead sink is unsightly, as if that mattered much in a *dark*-room; but, even admitting that it is, it is pleasanter to look at than a good negative in a score of pieces.

On the left, toward the back, a small bracket shelf carries a lamp of the kind that I generally use—a paraffin lamp, with a deep amber reservoir, round wick, ruby chimney, and a metal top. Gas has its advantages, but I should not care to use a gas-lamp unless it could be connected directly with a ventilator.

The ruby chimneys in the market vary considerably in their depth of tint, and should be selected with care. A piece of orange-paper fastened to the wall behind the lamp helps to increase the effective illumination by reflecting rays of the right kind. The same lamp is also provided

with orange-chimneys for use when making bromide prints or lantern slides.

Behind and above the sink are shelves carrying the developing solutions most commonly used, the glass measures, etc., and above these are wider shelves serving for general storage.

To the left of the sink, across the end of the room, is a table, 3 feet high and 11 inches broad, fitted below with three shelves for holding dishes. The lowest shelf is eighteen inches from the floor, and the space underneath is used for storing the stock solutions of hypo, alum, etc., which are kept in "Winchester quarts." On this table are placed the two dishes of hypo solution used for fixing, and on the rare occasions when alum has to be used the dish containing it finds accommodation on the same table.

Parallel with the sink, on the opposite side of the room, is a row of shelves, 11 inches broad, which serve a variety of purposes. The top shelf, which is 5 feet high, carries the stock solutions of developers and other substances, such as reducers and intensifiers, which are only occasionally used. The next shelf holds the boxes of exposed plates waiting to be developed, and the shelf below that, with an interval of only four inches, is kept free from permanent encumbrances, and serves to accommodate dishes containing plates that require prolonged development, and need to be protected as far as possible from light.

Below, with a space of sixteen inches, is a shelf which carries, when it is not in the sink, the zinc tank in which plates are washed, the remainder of the space being used as a draining-table for clean measuring glasses, etc. The lower shelves hold the porcelain dishes which are used for prints.

At the end of this set of shelves there are several hooks for towels and dusters, while below, standing on the floor, is a box for waste paper, etc.

The distance from the front of the sink to this row of shelves on the opposite side is only 3 feet, and it might at first sight seem that this would not be sufficient, but in reality it gives ample room for anyone who does not spread-eagle his elbows; and no matter how wide the room might be, I should not make this space more than 4 feet, because it really is a very great convenience to be able to keep solutions, etc., that are not often wanted, away from the sink and from the working shelves, and yet be able to get at them at once by merely turning round, to say nothing of the advantage of having convenient shelves for the boxes of plates, etc., within equally easy reach.

All sets of shelves that stand on the floor should have a plinth—that is to say, the bottom shelf should be from 4 to 6 inches above the floor, the open front below it being properly closed up by a board. In this way the bottles on the lowest shelf are not liable to be damaged while the floor is being swept, and the plinth prevents dirt, etc., from being swept into the space between the lowest shelf and the floor.

These arrangements have been described in detail, not because they are ideal, but because they actually exist and are found to be on the whole very convenient. They also seem to be the best that the available room will allow of, and they may fit the circumstances of some other workers. At the same time there are defects, arising from the fact that the positions of the door and of the water supply and the waste limit the length of wall space available. The distance between the fixing baths and the sink is too great, and their relative positions involve a risk of some fixing solution dropping on the floor, though this is minimized by the method adopted. It would also be more convenient if the washing tank could always stand in, or be much closer to, the sink. Further, because there is no available space at either end of the sink, the shelves carrying the working bottles, measures, etc., have to be over the sink at the back, and hence there is the possibility of bottles or measures being dropped into the sink or into the dishes, especially if one's fingers happen to be wetted with soda solution.

* * * *

If it should be necessary to protect the wall at the back of the sink or elsewhere from splashes of water and other liquids, this can easily be done by tacking up a sheet of thick Willesden paper or thin Willesden card.—*Practical Photographer.*

EVERYDAY PORTRAITURE: I.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: II.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: III.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: IV.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: V.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: VI.

By Frank G. Schumacher

EVERYDAY PORTRAITURE · VII.

By Frank G. Schumacher

EVERYDAY PORTRAITURE: VIII.

By Frank G. Schumacher

# THE CONVENTION OF THE PHOTOGRAPHERS' ASSOCIATION OF NEW ENGLAND.

BY CHARLES W. HEARN.

THE fifth annual Convention of the Photographers' Association of New England was held in Copley Hall, Boston, August 27–30, and was one of the most successful meetings ever held by this Association, even when the great success of its former meetings is recalled.

There were exhibits from eleven different States outside of New England, including many fine examples of photography, from California and the Middle West, as well as from Eastern States and the South.

The Association had as guests Mr. Frank Schumacher, of Los Angeles; S. L. Stein, of Milwaukee; "Papa" and Mrs. Cramer and Julius Strauss, of St. Louis; Mr. and Mrs. W. B. Dyer, of Chicago; E. B. Core, Mr. and Mrs. W. M. Hollinger and daughter, Theodore Marceau, and George Bassett, of New York; and Mr. Charles Abbott, of the General Aristo Company.

The Convention was opened by President George H. Van Norman introducing Mayor Thomas N. Hart, of Boston, who gave a warm address of welcome to the attending delegates. Mr. Hart was Mayor of Boston at the meeting there of the Photographers' Association of America in 1889.

President Van Norman's address to the Convention was more than usually interesting, and while practical and inspiring to his friends, which includes all the members as well as guests of the Association, it was noticeable that his remarks were flavored with that poetic inclination or ideality seen in many of the magnificent pictures he has exhibited at the conventions, the success of which has made the name of Van Norman synonymous with art and photography. His closing with an apt quotation of poetry, beside being what might be expected from Mr. Van Norman, was as harmonious as the artistic spacing, mounting, and framing of his genres.

There was introduced again this year as an educational feature a practical demonstration of lighting and posing on the platform under a skylight which had been arranged for the purpose. The management of this skylight demonstration was assigned to and ably conducted by Mr. Will Armstrong, the President of the Lens and Brush Club, now well known to fame. By his notable work in this, assisted by Mr. M. B. Parkinson on one occasion, the Convention skylight was one of the features of the meeting most appreciated.

A reception was given on Wednesday evening by the Lens and Brush Club at their club-room, 19 Essex Street, which was attended by about 100 members of the Association, and from 6 P.M. to 7 P.M. there was a regular meeting of the club for the purpose of showing the methods of criticism in vogue at the club, which have done so much for the artistic growth of its members during the last year. In this the visitors participated. The meeting was most enthusiastic, and many applications for membership in the club were received.

On Wednesday evening Mr. W. I. Scandlin, of New York, gave his lecture (as presented before the National Convention at Detroit) on "Victor Prevost—Artist, Photographer, Chemist."

On Thursday morning, August 29th, after the appointment of various committees, Mr. T. H. Cummings, of the *Photo Era*, delivered an address on the life and work of the late Mr. Hawes, of Boston, one of the pioneers in photography in America. This was followed by an address on "Carbon Printing," by Mr. Charles W. Hearn, of Boston. The speaker urged photographers to take up carbon work, and after informing those who had never made these pictures that the difficulties of the process were largely imaginary, gave a brief explanation of the single and double transfer methods, explaining many of the difficulties a beginner is likely to meet. He advised the reading of books on the subject, especially the perusal of the August, 1900, number of *The Photo-Miniature*, and other publications on the subject as therein given.

After Mr. Hearn's address, "Papa" Cramer gave the Association one of his characteristic and enthusiastic talks, and before he finished he had his audience shouting that they, like he, were "so happy." He certainly did make us all "so happy" when he honored us with his presence, the first time he has been in Boston since the National Association met here in 1899.

At the afternoon session Mr. E. B. Core, President of the National Association, gave us a short and pleasant address. We were pleased that Mr. Core was able to visit us, as it gave our members an opportunity of meeting him.

Mr. W. M. Hollinger made a hit with one of the most lively and characteristic speeches that this very fluent speaker ever gave. Space will not permit me to give much of an idea of it here. In one part of it he indirectly made known his principle of making pictures by expressing his intense desire to properly portray his hand, as he sees it, in all of its life, strength, action, etc. It may appear to our readers a simple thing to do, but if the picture is to possess a tithe even of what Mr. Hollinger sees in the hand by his description, I assure the reader that he has the job of his life to accomplish. I thought of trying it, but did not have the nerve, but took the task instead, thinking it easier, of trying to photograph Mr. Hollinger himself, relying mainly upon Mr. Hollinger looking and acting himself at the critical time. I am now waiting for reports from the proofs to see how hard I fell down.

On Thursday evening, through the liberality of the manufacturers and dealers in attendance at the Convention, a most enjoyable evening was spent at Keith's Theatre.

At the morning session on Friday, August 30th, after most complimentary nomination and other speeches by various prominent members of the Association, the writer was elected President for the ensuing year. The cordial reception given to the new President, after he was congratulated and introduced to the Association with many warm words by President Van Norman, was deeply appreciated.

Mr. M. B. Parkinson was unanimously elected First Vice-President. Mr. Parkinson was formerly located in New York, having moved to Boston about two years ago, and is considered one of the leading photographers in New England.

Mr. H. A. Collings declined a renomination for Secretary for the third time. His action was reluctantly approved by the members of the Association familiar with the work he has done during the last two years for the Association's benefit, and it was felt that he had done his share and earned the right to be relieved from further active work on the Executive Board.

The Association is very fortunate in having for its new Secretary Mr. George M. Bolton, of Rockville, Conn., one of the strongest men in New England, and in retaining Mr. S. M. Holman, of Attleboro, Mass., for another year as Treasurer.

The various State Vice-Presidents selected were: W. C. King, of Portland, for Maine; H. E. Cutler, of Barre, for Vermont; W. R. Call, of Manchester, for New Hampshire; L. L. Anderstrom, of Bristol, for Rhode Island; G. E. Tingley, of Mystic, for Connecticut.

At the afternoon session Mr. Hearn described his method of making his composition pictures, "Allah is Great" and "Hold, Infidel," and the taking of house portraits, and after a witty address on "How to Take Pictures Under a Brick Skylight," by Mr. H. A. Collings, the Convention adjourned.

At the banquet in the evening, with Mr. S. M. Holman as toastmaster, an interesting address was made by George H. Hastings, of Boston, the father and first President of the Association. He was followed by E. E. Core, S. L. Stein, Julius Strauss, President Van Norman, C. W. Hearn, Darius Cobb, M. B. Parkinson, H. A. Collings, and others.

### *The Salon Pictures.*

The following list comprises the work honored by being hung in the New England Salon of 1901, the figures showing the number of pictures by each member accepted:

S. L. Stein, Milwaukee, Wis., 3; Will H. Towles, Cumberland Md., 1; A. Marshall, Boston, Mass., 1; A. T. Proctor, Huntington, W. Va., 1: Wm. B. Dyer, Chicago,

Ill., 1; Henry H. Pierce, Providence, R. I., 2; Morris Burke Parkinson, Boston, Mass., 3; Charles W. Hearn, Boston, Mass., 3; Will Armstrong (Conley Studio), Boston, Mass., 3; H. A. Latimer, Boston, Mass., 5; Lee Rollinson, Cambridge, Mass., 1; Wm. H. Partridge, Boston, Mass., 3; John H. Garo, Boston, Mass., 1; W. G. C. Kimball, Concord, N. H., 2; E. G. Merrill, Salem, Mass., 1; Franz Geisler (Randall Studio), Hartford, Conn., 1; George H. Van Norman, Springfield, Mass., 1*; Julius Strauss, St Louis, Mo., 2; Brookline Art Union, Brookline, Mass., 1; C. A. Johnstone, Hartford, Conn., 1; H. Schervee, Worcester, Mass., 2; George H. Tingley, Mystic, Conn., 3; Rudolph Eickemeyer, Jr. (Campbell Studio), New York City., 1; D. D. Spellman, Detroit, Mich., 1; Alfred Holden, Philadelphia, Pa., 1; Clarence M. Hays, Detroit, Mich., 1; J. Will Kellmer, Hazleton, Pa., 2; Huntington & Clark, Detroit, Mich., 1; Dudley Hoyt, Rochester, N. Y., 1; James Arthur, Detroit, Mich., 3; W. E. Marshall, Arlington, Mass., 1: S. M. Holman, Attleboro, Mass., 2; Whitney & Son, Cambridge, Mass., 1;

## THE PICTURES AT THE DETROIT CONVENTION.

BY WILL ARMSTRONG.

VERY naturally, the greatest interest in a photographers' convention centres in the exhibition of the work of its members. As a consequence of this, we find many photographers attending our State and national conventions year after year simply to see the exhibition, to see how their own work compares with the output of their co-workers, and upon what lines progress is being made.

To the serious portraitist the regular attendance at the conventions offers a ready means of watching the growth and progress of promising men in the profession. There are always men who are coming forward, and men who are going back, or standing still, as far as growth is concerned. It was from this point of view that I looked over the pictures at Detroit, and at the editor's request I have put my impressions into these notes. It is hardly necessary to say that they have no value save as frank expressions of opinion, and that I have tried to be as fair as possible in order to avoid bad feeling.

The convention display was at once interesting and disappointing. My first impression was that it was an unusually strong show. Closer examination revealed the disappointing fact that few exhibits averaged well. The mistake of exhibiting one really good piece of work among ten mediocre efforts was very apparent. As soon as photographers learn how to criticise their own work, or can get the help of such a body of critics as we have in the Lens and Brush Club of Boston, this defect will disappear from our exhibitions. For proof of this I need only point to the collection of work exhibited at the convention by the Lens and Brush Club—an exhibit admitted to contain more good work and less bad work than any other group.

The special display of Rudolph Eickemeyer's picture, "When the Daylight Dies," with a placard announcing its price as $1000, failed to win popularity, and the absurdity of the price aroused adverse criticism. In itself the picture was a good piece of work.

Elias Goldensky, of Philadelphia, showed nine prints demonstrating his versatility. The fact that they were unmounted detracted from their favorable appearance, but a study of them clearly showed that Mr. Goldensky has more than usual skill, and must be regarded as one of the most promising of our younger portraitists.

Considerable interest attached to a frame containing three portraits of Cleveland's oldest photographers—"The Old Guard"—James F. Ryder, Jerry Green, and E. Decker. These were sent by Mr. Decker.

D. D. Spellman, of Detroit, was well represented in the exhibit of the Ohio-Michigan Association by ten carbon portraits, showing much individuality. His twenty-inch panel of Herbert Kelsey was

* This picture was also selected for the "Interstate Exhibition."

one of the strongest portraits seen at the convention.

Nine platinum prints, exhibited by Huntington & Clark, of Detroit, showed good handling, but lacked in variety.

The exhibit made by C. M. Hayes, of Detroit, was well balanced, and probably gave the average professional worker more satisfaction than any other single exhibit. In particular, a portrait of a lady, full figure, leaning against an arbor of leaves, attracted special praise.

Histed, of New York, sent a strong collection of home portraits, and it is not unlikely that he will be the most numerously imitated stylist during the next year.

President-elect Geo. Edmondson showed eight warm black carbon portraits far ahead of any work previously shown by him. Among these a head of Elbert Hubbard was a wonderful bit of chiara-oscura.

The exhibit of children's portraits by W. F. Core, of Cincinnati, proved most conclusively that a special skill in child-portraiture runs in the Core family.

Among the finest work seen at the convention were the nine genres sent by James Arthur, of Detroit. To single any one of these out for special mention would be to do injustice to the other eight. Mr. Arthur has never previously shown his skill so conclusively as he did in this exhibit.

The Baker Art Gallery (Columbus, O.) exhibit was permeated by an air of artificiality, and Mr. John Schneider would do well to take point from Mr. Arthur in getting an outdoor atmosphere in subjects representing out-of-door scenes.

Steady progress toward higher standards was evident in the pleasing collection of portraits sent by D. Rosser, of Pittsburg.

Fowler, of Evanston, Ill., sent twelve carbons which showed considerable thought and feeling, but lacking in variety.

Twelve prints by W. H. Minns, of Akron, O., demonstrated that this worker is perfectly satisfied with his past achievements, no improvement or change being apparent in his work.

S. Aune, of Portland, Ore., exhibited two life-size portraits far above the average, and which did him great credit.

Moore & Stephenson, Atlanta, Ga., did not reach as high a standard as they achieved a year or two ago. The same could be said of the work of Giffin, of Wheeling, W. Va.

C. W. Bolton, Rockville, Conn., was represented by a few charming pictures of children, which demonstrated that there is no need to go to New York or a large city to get good portraits if one lives near Rockville.

C. R. Reeves, Anderson, Ind., is growing steadily, and his eight pictures would have done credit to any of the leaders.

W. B. Dyer, of Chicago, sent twelve sepia platinums, exhibiting his peculiarly individual style. I was not impressed by them.

Hughes & Sargent, of Detroit, had five fine genres hung so high that few people could appreciate their real excellence. The portrait of an old man by Will Kellmer, of Hazleton, Pa., and the exhibit sent by Alfred Holden, of Philadelphia, suffered in a similar way.

Lifshey, of Brooklyn, sent a good example of platinotype modified by the glycerine method.

Moses & Son, of New Orleans, seem to need a stiff competitor in their town to force them back to their former high level. The exhibit sent by Steffens, of Chicago, was another disappointment, possibly caused by overmuch expectation on my part.

Falk's exhibit proved that a clever portraitist can make something entirely distinct from his usual line and yet retain his individuality. It was clever.

Hollinger's display was the best collection of small work at the convention, but the exhibit sent by J. M. Appleton, of New York, did not impress me as being equal to his work of ten years ago. The display made by the Misses Selby, of New York, was decidedly good and encouraging.

A year ago Mr. S. L. Stein looked over the convention exhibit, and said that he "wasn't in it." His work to-day must be an improvement over that of a year ago, for he had one of the best exhibits in the hall. A full-length portrait of a lady seated at a window was marvellously clever as a picture portrait.

The exhibit made by Strauss was the centre of an interested crowd all the time. His etching effects were much admired and decidedly attractive.

F. Dundas Todd, as twelve photogra-

phers saw him, is too well known to discuss, but the exhibit was one of the best collections at the convention.

In the portraits shown by Pirie MacDonald and Dudley Hoyt a comparison in advancement between master and pupil may be made with interest. Mr. MacDonald is still in the lead, but the daring and skill of his pupil marks him as one to be watched.

Gertrude Käsebier, of New York, was represented by a small collection of work, exhibiting the strong individuality which marks all her portraiture.

George Van Norman, of Springfield, Mass., sent a picture which attracted much attention. It showed the haste Mr. Van Norman used in its production, but its maker was so generous in his criticism of its faults that no further comment could be made.

J. Ed. Rösch, of St. Louis, made an exhibit of general good quality, but not calling for special mention.

Guerin, of St. Louis, showed a series of flash-light genres, demonstrating his unequalled skill in this peculiar class of work.

Schervee, of Worcester, Mass, sent a fine collection of portraits, of which that of Mr. Seton Thompson was undoubtedly the best.

F. G. Schumacher, of Los Angeles, exhibited some good everyday portraiture, comprising vignetted portraits on a light ground and others with a dark ground. These were printed on a deckle-edge paper and counter-sunk. The novel style was much admired, and the quality of the work spoke for itself. [These are fairly represented in the supplements in this issue.—Ed. W. P. M.]

Clever displays were also made by President Core, H. S. Klein, Zweifel, of Dayton; but these suffered from being hung too high or too low. Other exhibits could not be properly seen because of the severe top-light.

The special exhibit of the Lens and Brush Club, of Boston, received unstinted praise from all present. The collection embraced pictures by John H. Garo, W. H. Partridge, M. B. Parkinson, H. H. Pierce, Chas. W. Hearn, W. G. C. Kimball, Franz Geisler, M. H. Latimer, and the Conly Studio—all New England workers. It hardly becomes the writer to single out any of these for special mention, but the remarkable quality of Chas. W. Hearn's "Hold, Infidel," "Allah be Praised," and "An Old Salt" astonished even those familiar with Mr. Hearn's growth during the past year or two.

## THE AGFA-REDUCER.

BY PROFESSOR R. NAMIAS.

During the last few years several reducing substances and liquids have been put on the market and advocated, it being evident that the familiar formula known as Farmer's reducer is not adapted to the requirements of present-day photography. The solution can only be prepared as required, and the action has far too much influence on the half-tones of an image. A silver bromide negative can really not be successfully treated with Farmer's reducer, owing to the almost complete loss of detail.

Of the newer reducers, ammonium persulphate, introduced by Messrs. Lumière Brothers, is favorably distinguished in that its action is to reduce great contrasts and produce a more harmonious result, for the reason that it acts chiefly on the denser parts of a negative. In cases where it is necessary to reduce a plate which has been over-exposed or over-developed it is necessary to use a reducer having a more general action than that of ammonium persulphate.

About the beginning of 1899 I recommended a reducer composed of potassium and sulphuric acid, the action of which was about half-way between that of ammonium persulphate and of Farmer's reducer. It does not spoil the half-tones as does the latter, and it is especially suitable for the reduction of over-exposed and over-developed negatives.

I have found that this new Agfa-Reducer of the Actien-Gesellschaft für Anilin-Fabrikation has the same advantage and characteristics as the permanganate reducer.

The Agfa-Reducer is in the form of a brown powder, easily soluble in water, and is composed of a ferric salt and an alkali thiosulphite. Five grammes of this powder (the hollow stopper just holds this quantity) is dissolved in 50 c.c. (1¾ ounces) of soft or distilled water. The plate to be reduced must be thoroughly washed before putting it into the solution.

Reduction takes place slowly and evenly, and the negative is reduced without the detail being lost in the shadows and half-tones, unless the process of reducing is extended for an excessive time. Generally speaking, sufficient reduction will be attained in five to eight minutes. I find that even with a prolonged action of the reducer the gelatine is not affected, as is the case with ammonium persulphate. While ammonium persulphate and potassium permanganate require a subsequent treatment of the negative, with Agfa-Reducer washing is all that is required. It is very efficient, always ready for use, and the action is complete in one manipulation.

For reducing bromide papers I advise the use of twice as much water, as reduction appears much quicker on paper. Further, I have found that a negative that has been over-intensified with mercury and ammonia may be successfully reduced with Agfa-Reducer.

The action is very rapid on collodion negatives, and the employment of the preparation would be especially suitable for photo-mechanical workers as a substitute for Farmer's reducer.

## CHILD PORTRAITURE.

It has always been a *convention* of photography to get the child interested. Some jargon about a pretty bird, some squealing lamb, or climbing monkey. Eickemeyer's message to the photographer is to remove the child—the very young child—from the studio to the nursery. The old style is to set the child on a skin rug in a great chair, and when the child looks at the pretty soldiers to press the bulb. Eickemeyer puts the child on the floor *among* the pretty soldiers, and snaps it at its play. There are pictures here of single children at play, of groups of children at play or "making believe," and there are little glimpses of children, some in fancy dress, so wholly charming in pose that we long to cut them from the book and paste them on the wall.

It is an interesting fact—and one not always admitted by the professional worker—that the best photography owes much to the amateur. Not that the amateur has taught him how, but that the wide possession of small cameras has raised a big class with ability to appreciate good work, and to pay for it.

In child portraiture the amateur influence is making itself felt in another way, for the cameras of fond mammas and others have turned out many snap-shots of their babes which are slowly but surely bringing to an end the old conventional child portrait. The work of such firms as Brinkley & Son, of Glasgow, or E. B. Core, in New York, is a real advance upon any work of ten years ago. In fact, modern child portraiture as translated by these workers, by R. Eickemeyer, Jr., and by, we fear, very few others, may be termed a new branch of the science.

We know our grown-up friends by their faces; our children we know in bulk, not in part, but from head to foot, by their thousand childish movements. And this is what photographers have failed to learn. Instead of treating a child as a thing apart, a thing of a thousand pictorial possibilities, they have persisted in treating it as a manikin, a bijou edition of some grown person, to be posed and lighted and retouched. "Head and shoulders" photography is very sparingly possible in child portraiture.

With grown-up people the photography (in the studio) of occupation is limited and perhaps difficult. We may portray afternoon tea, or sewing, but often a book or a newspaper is the extent to which we may interest the sitter. But in child photography nothing is more conducive to success—artistically and finan-

cially—than a whole-souled interest in life. Nothing can prove less really attractive than a showcase of badly-posed, awkwardly handled children—from the much frocked baby of a few weeks posed in hideous far-away imitation of its own feeding-bottle, to the conscious miss of twelve, with the head- and body-rest aggressively touched out. Nothing is more certain to attract parents than a display of the happy abandon of childhood at play. How those who are responsible for bringing a child to the studio love to note the dainty picture of the little girl sewing dolly's clothes, or making dolly's bed, or gravely pouring out afternoon tea for her expectant flock. It is a perhaps unique case in which the better (because more natural) art is also the popular and therefore paying art, and as such ought to rejoice the hearts of many pessimists who declare that there is no good thing in photographer's patronage.—From "Child Portraiture of R. Eickemeyer, Jr.," in the September *Photogram*.

## DARK-ROOM ILLUMINANTS.

BY A. D. PRETZL.

THE natural conservatism which seems inherent in the photographer has probably been one of the chief causes of the retention of the ruby light in the dark-room, though it has often been pointed out that it is possible to employ other colors which are equally safe and give more illumination.

Unfortunately, many of the glasses and mediums which are to be obtained commercially are neither safe nor brilliant, and those which are safe have, as a rule, such a great absorptive power for the illuminating rays, which are, of course, those in the neighborhood of the yellow and yellowish-green spectrum rays, that it is impossible to work in anything like comfort, and it is too often a literal groping in the dark to find anything. There is also another disadvantage incident to the use of these feeble illuminants, and that is that one has to examine the plate during development so close to the light that there is considerable danger of fogging it, for it must not be forgotten that although an ordinary plate —and by this term is meant one that is not color-sensitized—is not especially sensitive to red and orange, yet it is not possible to expose any plate to any red or orange light for any length of time without obtaining some light action, and this usually in the undesirable form of general fog.

The red and orange light is undoubtedly a legacy from the old collodion days; but with an increased knowledge of the sensitiveness of plates and the absorptive action of dyes, there is no reason why we should any longer be tied to commercial glasses.

Orange glass is principally of two kinds —a silver flashed glass and a dirtier orange pot made by stirring the molten glass with willow sticks, by which means the wood is charged and probably some compound of silica and carbon is formed, which gives the characteristic color to the glass. The silver glass, which is the brighter of the two, exhibits when spectroscopically examined a strong absorption in the blue and blue-green, but passes violet, and, as can be proved photographically, a considerable portion of ultra-violet. The wood glass, on the other hand, exhibits a strong absorption in the ultra-violet and violet, and a weaker absorption in the blue, so that a combination of the two is much safer than either used alone, and the only objection is that the whole of the spectrum is considerably damped.

Many of the so-called ruby glasses in the market are ruby merely by suppression of the green and blue-green rays, and an experiment tried last week showed that with a panchromatic plate the spectrum could be photographed with an increase in exposure of only four times, and good density obtained, reaching from B ½ C to D ¼ E, and from G to K in the ultra-violet.

Visual examination of a glass is of but little use, but by no means a bad visual test is to take a piece of stout cardboard and cut a small aperture in it, and then cover it with the glass to be examined, and then superimpose a deep cobalt blue or so-called violet glass; if the aperture can be seen it is almost safe to conclude that some

of the active blue or violet rays are transmitted. Carrying this test further, it is of course extremely easy to place such a combination in contact with a plate, either in a dark slide or printing frame, and exposed to the actual light used in the dark-room for varying periods of time, when it will be found on development how long it takes to obtain fog. For this purpose a long rectangular slit should be cut so that parts may be covered up at definite intervals.

The use of liquid screens for the dark-room, which was so prominently brought forward by Howard Farmer in his paper before the Royal Photographic Society last year, has not come into general use, solely, I believe, because lanterns thus fitted to take the cells are not general; so far as I know, two firms only having placed them on the market. There must be, however, many among your professional readers who have among their lumber disused wet-plate baths, and these can be very easily fitted to any existing dark-room lantern with a little ingenuity.

The home preparation of colored filters is extremely easy, as it merely means the coating of a sheet of glass with plain gelatine solution, or even the utilization of a spoiled plate or old negative, from which the silver can readily be removed by potassium cyanide or ferridcyanide and hypo, when, after a little washing, one has a sheet of glass evenly coated with plain gelatine, which readily takes any dye, and by using one or more of such dyed plates, light of any intensity or color may be obtained at will.

I propose to give some suitable dyes and formulæ for dark-room lanterns, but it must be noted that they are in every case adjusted for artificial light, actually that of an eight candle-power incandescent electric light; but they are equally suitable for oil or gas, but can, of course, be then slightly reduced in intensity of color, as the latter lights are by no means so rich in the actinic ultra-violet and violet rays as the electric light, nor this so rich as daylight. Although I have made no exhaustive experiments, I have found, however, as a general rule, that practically double the intensity of color is requisite for day as for artificial light, or if not actually necessary, then this may be assumed as a convenient standard.

Messrs. Lumière, the well-known dry-plate makers of Lyons, utilize green filters entirely throughout their factory, and this for their color-sensitive as well as ordinary plates, and there is no doubt that, when one gets accustomed to it, it is as pleasant as any light to work with.

In making dark-room filters there is always one point to be taken into consideration, and that is whether one is content to work merely by reflected light only, or whether one utilizes the direct rays of the lamp. In the former case a very much more brilliant light can be used than in the latter, and so much so that a light which would fog a plate within a minute can be safely used if the dish is kept covered and the lamp turned so that the light falls on some reflecting surface, such as a wall, and thence on to the dish.

It must be distinctly understood that the following formulæ are only suggestive, for so numerous are now the aniline dyes that one has almost only to choose one of the desired colors to find that it will, with a little adjustment, make an excellent colored filter, or, if not alone, then in combination with another.

Howard Farmer has recommended a 6 per cent. solution of potassium bichromate, which gives an absorption commencing about D ⅔ E and rising gradually to a maximum at F. Bichromate of ammonia is more soluble than the potash salt, and thus stronger absorbent solutions can be obtained. Aurantia and methyl-orange are slightly more absorbent of the green. Another excellent dye is known as cochineal red A, and in a solution of 1 : 500 this gives a complete absorption from D ¼ E; Biebrich scarlet is another good absorbent. Lately, in Germany, we have had introduced a specially pure dye, auramin, which in 1:1000 absorbs completely from E ¼ F, and it merely requires the addition of a little methyl-violet to give a screen that absorbs from C ½ D completely; one of the most effective filters is obtained by making a saturated solution of Mandarin G extra, a dye specially recommended by Popowitzky, and another one suggested by Nagel is lithia carmine, made by dissolving 2½ grammes of carmine in 100 c.c. of saturated solution of lithium carbonate.

For making dry screens there is nothing

better than, for pure red light, from A to C, to use one gelatine-coated plate soaked for 10 minutes in a 5 per cent. solution of ammonium picrate, and another one in a 1 per cent. solution of methyl-violet, or one may be dyed with auramin or aurantia, and the other with the violet. For a green light naphtol green should be used for one screen and auramin for the other.

In making colored filters I have found it more convenient to bathe three or four plates in different dyes than to mix them, for, in the first place, one is never quite sure whether the dyes will not act one upon the other; and, second, there is no means of altering the light; whereas if two or three screens are used, it is extremely easy to lift one out or insert another, and thus obtain brighter or deeper illumination as desired, and the cost and trouble of making these screens is infinitesimal. There is also one other point to remember, and that is, that practically when we want to absorb a color we must use a dye of complementary color—thus, red for green, violet for yellow, and *vice versa*. Bearing this in mind, and with the simple practical test suggested above, it is extremely easy to make dark-room filters of any desired color.—*British Journal of Photography.*

## ECHOES FROM THE DETROIT CONVENTION.

OPINIONS OF PROMINENT PHOTOGRAPHERS CONCERNING ITS WORK.

JOHN H. GANNER, Russellville, Ark., was the only representative from that State present at the Convention. Mr. Ganner was much pleased with all he saw, and said that his trip well repaid him.

Clarence H. Smith, Rochester, helped to entertain the Conventioners at the Masonic Temple. Mr. Smith has attended every State Convention held in the United States during the last five years, and has been a member of the National Association since the second Chicago fire. He said that the Detroit meeting showed a marked improvement over any other National Convention, especially along art lines.

First Vice-President Spellman did some very hard work in connection with the Convention, and to him and his excellent lieutenants should be attributed a large share of its success.

Mr. F. W. Guerin, St. Louis, had a most unique collection of photographs from life models, by flashlight. Mr. Guerin predicted that this will be the future method employed in all photographic work. There were a dozen pictures which were especially admired in his display, all made on the afternoon of Saturday preceding the Convention. The exhibit attracted very general admiration. Many could hardly believe that such results could be had by flashlight. Mr. Guerin was of the opinion that everybody had had a glorious time. He thought the impressionist style in portraiture would surely decline.

Mr. Curt. M. Treat, Secretary of the Bureau of Conventions and Industries, Buffalo, considered the P. A. of A. one of the most desirable conventions in the country, not only in point of numbers, but in the make-up of the people attending.

Mr. E. Decker, Cleveland, Ohio, Ex-President of the Association, pronounced the Convention one of the best that had ever been held. The friendly spirit is growing continually. The profession cannot rely upon the blossoming out in individual cases of a high grade of artistic talent, which, while well enough in its way, will not take the place of practical, everyday ability. Photography in the gallery must always rely largely upon portraiture.

Mr. J. F. Ryder, Cleveland, Ohio, one of the pioneers in Convention work, came to the Convention in response to a special invitation by telegraph, and enjoyed his holiday exceedingly.

Mr. J. A. Brush, Minneapolis, thinks that the trouble with the average photographer of to-day is that he does not study the characteristics of his sitters. You must study your subject, and have magnetism enough to carry them away

from that unpleasant thought of picture-making which always destroys naturalness.

Mr. C. R. Reeves, Anderson, Ind., said: This Convention is much better than many I have attended in every way. The entertainment features were up to and exceeded anything that could be reasonably asked. Manufacturers and dealers displayed a most laudable interest. The educational feature was well conceived, and has brought out men that we have not been able to interest heretofore.

Mr. G. Cramer, St. Louis, said: It was a most successful Convention. We were favored by weather of the finest, a large attendance, equally good in quality as in numbers, and were nicely entertained by the Detroit people as well as by the manufacturers. My motto, "I am so happy," was the keynote of the Convention. We have learned from Mr. Hollinger how to take things "all right."

Mr. Frank R. Barrows said: The Convention equalled the anticipations of the officers. There were nearly $800 paid dues from members, and over 300 ladies in attendance. The attendance of ladies was the largest of any Convention. From a financial stand-point the Convention was a success, and the Association will start on the new year with a good balance in the treasury.

Mr. C. M. Hayes, Detroit, said: I believe that the doing away with prizes had a tendency to bring out more original ideas, and that the Association was the gainer tenfold more than by the former system. I was astonished when I passed through the exhibits and saw the widely differing manner of doing work. Exhibits for prizes compelled certain restrictions which hampered the exhibitors. In this the new system shows a decided advance. I attribute the credit for the success of the Convention primarily to the efforts of Mr. Core, and secondarily to the work of the citizens of Detroit.

Mr. A. L. Bowersox, Dayton, Ohio, said: It impressed me as being fine in every detail. I enjoyed the picture display above anything else. The difference in the work was marked, showing an advance, although as between individual photographers this advance has not been so great. With few exceptions the improvement was quite uniform.

Mr. E. Goldensky, Philadelphia, thought the educational idea was ideal, but that not enough attention was paid to demonstrating new ideas and methods. The pictures hung were of great value. He thought many photographers present would have liked to have had explained to them with some detail just how the special good points were obtained. He rather deprecated the emphasis on the entertainment feature, and thought that more photographers should come to the National Convention, and thereby learn to respect the rights of their competitors.

Mr. C. Smith, Evanston, Ill., said: The exhibit was the best in a great many years from an educational stand-point, showing great progress on the art-side, which is more especially needed now than any other. Photographers, as a rule, have given too much attention to the mechanical end. He was glad to see the tide turning, and that more feeling is being put into the work, as evidenced by the exhibits.

Mr. Chas. W. Hearn, as a member of the Lens and Brush Club, of Boston, was pleased at the reception of the ideas and plans of that club, including the method of criticism in vogue at their meetings. He hoped that the National Association would follow the model set by the Lens and Brush Club; also, that the same will extend itself to the State Association.

Professor Lucius W. Hitchcock, Buffalo, said: I think, in a general way, that the photographers are developing into the people who are to cultivate the popular taste in our direction in art. It is evident that the artistic photographer has just about as much opposition and just as hard a struggle to carry out the conceptions that he knows to be good, and not to toady to the popular demand for common commercial stuff, as artists in any other line. When the time arrives that photographers are all artists, the public appreciation for good pictures of every kind will be very much improved. They are now making it rather difficult for a bad painter to make a living,

and the time is very close at hand when it will be impossible for a bad painter to pass his daubs off on the public. If photography can do this it will be doing artists a service which they will surely appreciate. I personally feel that there is a great future for photography, and I expect very shortly to see many more photographers taking up an earnest study of art as an integral part of their training.

Mr. W. E. Eutsler, Danville, Va., said: I was glad to see such a fine representation from the South, exceeding that of any other year.

Mr. C. W. Cole, of Cole & Holliday, Durham, N. C. (Ex-President of Joint Virginia and North Carolina State Association), was sure that it was a most instructive Convention, calculated to make a man go home and do better work.

Mr. W. H. Moses, New Orleans, said: The pictures showed very high artistic excellence. I approve of the abolishing of prizes. It put us on a more dignified footing, and has proved a great advantage. I do not think the shortening of the number of days the Convention was in session was well advised. People must have some chance to meet each other. In future Conventions the exhibition hall should be illuminated and the pictures open for inspection at night, in order to give all an opportunity to examine them.

Mr. D. B. Thompson, Kansas City, said: The class of people in attendance impressed me as of an unusually high order; but I think there is too much of a tendency, if we are to judge by the pictures displayed, toward the art side. More attention should be given in the Convention to the pictures in everyday demand.

Among the Canadian photographers present were Chas. Cochran, of Hamilton, Ont., and J. H. Hopkins, of St. Thomas, two Ex-Presidents of the Canadian Photographers' Association. These gentlemen expressed regret that the interest in the Canadian Association has been on the wane for the last year or two. It is hoped that it may be revived, and some action looking toward that end was taken by those attending the National Convention.

The election of George Nussbaumer, of Buffalo, as First Vice-President, was a deserved compliment to a hard-working and painstaking official, who in the last two years has done much to further the success of the Association.

Among the prominent absentees were J. C. Strauss, St. Louis; S. L. Stein, Milwaukee; B. J. Falk, New York; I. Benjamin, Cincinnati; F. A. Rinehart, Omaha; B. F. Hall, Buffalo; G. W. Varney, Chicago; E. C. Dinturff, Syracuse; J. M. Appleton, New York; M. L. Steffens, Chicago; Geo. Steckel, Los Angeles; W. J. Thuss, Nashville; C. W. Motes, Atlanta, Ga.

The Executive Committee of the Ohio-Michigan Association held a meeting at the Russell House, on Tuesday evening, during the Convention, and decided to meet at Toledo next year, provided proper hall and hotel accommodations can be secured. The date is not yet determined. It was decided not to offer any prizes, except possibly a general prize open to all photographers, without restriction as to class or territory, probably a money prize. There was quite a general attendance from Ohio and Michigan, and no notable absentee.

Professor Griffiths gave a reception to the photographers at the Art Museum on Friday evening, and entertained them with an informal talk on the pictures, including a splendid selection of photographic reproductions of paintings by old masters.

J. E. Giffin, of Wheeling, W. Va., did a good act in affording to those on the Aristo Excursion, Thursday afternoon, an opportunity to put their names down on the list of those contributing to the purse for Mr. Jex Bardwell, which netted nearly $100. By some bitter irony of fate, Mr. Giffin was relieved of his pocketbook on the moonlight trip later, containing about an equal amount of money.

There was quite a representation from the South, among whom we noted Cole & Holliday, Durham, N. C.; C. T. Wharton, Raleigh, N. C.; Sid Alderman, Greensboro; H. Plecker, Lynchburg, Va.; W. E. Eutsler, Danville, Va.; J. E. Giffin, Wheeling, W.Va.; Moore and Stephenson, Atlanta, Ga., and others.

# SAVING A LIVING.

BY R. H. MOSS.

THERE are hundreds of successful photographers—men who are making at least a comfortable living from their profession—and there must be hundreds more who find that it is all they can do to scrape along. In bad times they seem just to hang on to their businesses by the skin of their teeth, and in good times they are very little better. This is not the fault of their work, perhaps—lots of men are making money with cheap work in cheap districts—it is more often the fault of a little looseness in business management. Many ways are ever being recommended for the increasing of business, and hand-in-hand with them should go methods of preventing leakage. From what I have seen in not a few studios, I know that much money is in the aggregate wasted. If this were saved it would make a vast difference in the balance at the end of a year.

I think it must be the new styles in mounts that suggested to me the question of saving. There is a new pattern of mount every month, and the persuasiveness of the drummer leads to much overstocking. This is one fruitful source of leakage. Instead of buying paper frequently and in small quantities, photographers will place solid orders. This is not necessarily a mistake. Paper is shipped abroad and endures foreign climes for months, but the fact is that when there are lots on hand some is wasted. If only the photographer spent an evening in figuring out how many sheets of paper are lost in the course of a year by over-printing or under-printing, he would often find that several dollars had gone astray. Several dollars is not much, but with a similar leakage in every department it mounts up. There can be no such thing as one rule for all cases, and this applies strongly to the number of exposures made on a sitter. But many photographers will expose a number of plates and then choose from them the one or two most satisfactory ones. Were the photographer master of his craft he would have seen these one or two most satisfactory ones before he made the exposure. But it is a melancholy fact that in many studios there is a careless and unnecessary waste of materials which represent hard cash. Cutting down on this can only be parsimony in the case of incompetent workers, for there is little of luck and chance in these practical parts of photography. Plates and paper are made so perfect nowadays that any failure need not be guarded against as arising from defects in them. The failure is in the method of the photographer. There is, of course, the mistake of being too careful in the use of material, but it is a much rarer one than the mistake of wastefulness.

The possession of a negative—*i. e.*, of a customer—might be considered as an asset which is often overlooked. There is the waste of plates in getting the satisfactory negative, and then the thing is allowed to drop. It is a strange thing how many photographers there are who take an order for a dozen cabinets and there end the matter. Everybody knows, in a general way, that "cabinet" is a photographer's stock size, and knows, too, that photographs are usually sold in dozens. Therefore they go to the studio with an idea of obtaining a dozen cabinets. How often a miniature can be printed from the self-same negative, printed in a different tint, or even colored and enclosed in a gilt frame. Or a print may be fitted in a neat frame—frames are too much neglected by many photographers—to stand on a table or the mantel. Very often, if properly handled, a negative is only half through its usefulness when the dozen prints are run off. Too much value is put on stock negatives, and great numbers must necessarily be kept because a few of them will be useful for repeat orders. But a negative is never worth so much as in the first few weeks of its existence, and this is a main fact which is overlooked; and money which is lost from neglect of this may be fairly considered among the leakages.

It is on many little things as much as in the general prosperity of the country that the success of many a photographer depends, and the sooner he realizes it the sooner will he escape from the condition of perennial struggle.

## WHO CONTROLS ONE'S PHOTOGRAPH?

THE items here reprinted from the daily press speak for themselves and are published for the information of our professional readers. This question of the indiscriminate reproduction of portraits is one which must inevitably become more and more important every year on account of the large use of portraits by newspapers and illustrated periodicals. It is, therefore, equally important that photographers should be well informed, and careful not to exceed their rights in the matter. [ED. W. P. M.]

The Appellate Division of the Fourth Department has decided that no person has the right to use for business purposes the picture of a woman without the consent of the person whose features are reproduced, and that such use gives sufficient cause for action. The case in question, that of Abigail Roberson against the Rochester Folding Box Company and the Franklin Mills of Lockport, was brought to recover $15,000 damages for the unauthorized use of her portrait for advertising purposes.

When the case was called in the Supreme Court a demurrer was entered. The Court held that there was sufficient cause for action, and it was from this ruling that the defendant companies appealed. On the first argument the Court was divided. In deciding in favor of Miss Roberson on the reargument, the Court cites the instance of the Siamese twins, and holds that the use of Miss Roberson's likeness would be as unwarrantable as to depict that curious monstrosity without permission.

Miss Roberson will now prosecute her suit in the Supreme Court to collect damages.—*N. Y. Times.*

*The Control of One's Photograph.* A decision was rendered in the Appellate Division yesterday in the Abigail Roberson picture case, affirming the opinion of Justice Davy that an action in damages lies against one who uses for advertising purposes the picture of a person without his or her consent. Every woman with an attractive face and every celebrity will be interested in the final disposition of this case; and the lawyers will be interested, for the ground of action is without precedent in this State. Miss Abigail Roberson is a beautiful girl of eighteen years who lives in Rochester. A few months ago she learned that her picture was being used in a lithograph advertising a certain brand of flour. Naturally she became the subject of much comment, and the notoriety had such an effect on her health that she took to her bed. By advice of counsel Miss Roberson entered suit for damages against the flour company and against the firm that had produced the lithograph. The declaration set forth that her right of privacy had been invaded, and when the case was tried before Justice Davy, evidence was submitted that she had suffered personal humiliation. The opinion of the Appellate Division was written by Justice William Rumsey. He doubted whether there were any authoritative cases establishing the plaintiff's right to recover. Certainly, as regarded this State the ground of action was novel. Every person has a right under the common law to immunity from interference with reputation or character, "or, as it is distinctly stated by Judge Cooley, he has the right to be let alone." Justice Rumsey continued: "I do not see why this principle, the object of which is to give every person a complete immunity from the acts of others which subject him to unnecessary fear or danger, cannot be and should not be applied to such an act as is complained of here. . . . I can see no distinction in principle between an act which without threatening physical harm injures the plaintiff's reputation by word spoken in respect of it, and the like act, which injures her feelings and diminishes the respect with which she is held in the community by saying or doing something in regard to her which tends to bring her into unnecessary and unwarrantable notice."

The Court went even further. Not only did a woman have the right to say what should be done with her own photograph, but an attempt to take a picture of her for sale to a painter or publisher would be a violation of her right of property and re-

strainable by legal process. This opinion, if upheld by the Court of Appeals, will have the effect of making the work of the kodak fiend of doubtful utility to publishers of magazines and pictorial newspapers. It should be law if law is common sense. While the light, which is the chief agent in producing a negative, is free to all, and the camera with which the picture is taken may not be the property of the subject of the picture, the latter may reasonably object to reproduction in a way to cause notoriety or annoyance. Consent is infrequently asked. A beautiful woman who is modest and sensitive sees her picture displayed on the same page with that of a notorious criminal or a celebrity of doubtful repute. Surely her feelings are hurt and she suffers anguish of mind. Why should not the law require that her consent be asked to the reproduction of her picture in any form or in any company? Of course, in a suit for damages it would be necessary to prove the extent of the suffering, until a law is put on the statute forbidding the use of pictures without consent of the subjects. Consent, so overweening is human vanity, it will never be difficult to obtain in many instances; but the person who objects to being paraded in the columns of a newspaper or the pages of a magazine should be protected.—*Evening Sun, N. Y.*

## MINIATURES.*

BY CARINE CADBY.

ONCE more the tide of public taste has run to miniatures, and again we see the quaint oblong cases and little round gold rims on the walls. But how charming are the old ivory miniatures! We look at our grandmothers with their abnormally large eyes and wonderful pink and white complexions, and admire the finished workmanship of the whole, and then we put down the little portrait with a sigh that we are only photographers, and that such art is not ours.

But do not let us be in such a hurry. If really we are photographers, then we have a certain power; we are able to obtain an image—usually a good likeness—and it is only the color that is wanting. To be sure it is a very big "only," still there is a way for some of us photographers to get a little near the effect of a painted miniature, and if not very near, to still be able to create for ourselves a more reasonable representation of a person than the cold tones of photography can give.

If we are photographers, it is probable we know something about retouching, and have had to apply a wash on the negative and spot a print; why then should we not try our hand at getting just enough color on to a print to make the subject look alive? I would recommend beginning on an ordinary platinotype in a very unambitious way, just to see what can be done. A faint wash of flesh color over a face is quite enough to stimulate enthusiasm and make the photographer eager to try more, so quickly is it done, and such a wonderful difference does it make. In fact, the photographer determines to experiment further, and I should like to give him a few hints how to go about it.

Do not begin with a spoiled print; it is discouraging and is no fair trial, but find one with good modelling on the face, neither too light nor too dark, and with a fairly sharp focus. Of course, the print should be mounted.

When it is pinned firmly to a drawing-board, take a paint brush and wash the face over with plain water, being careful not to go beyond the edges; while this is drying, mix the color for the flesh (vermilion and yellow ochre), which should then be applied with a second brush, keeping the first one wet and quite ready to hand, for, as soon as the color is on, it is wanted immediately, to wipe out the whites of the eyes, soften the edges, take off any bulbs of color left on, and to generally improve things. In putting on a wash we must try and get back to our school days, and remember how we used to do maps, and how it was our aim to get an even color that kept discreetly in

* Extracted from two papers in the Amateur Photographer (London).

its own country and did not trespass unduly into the next. This applies exactly to the washes we put on the print.

The hair is done next, a wash of plain water is first put on, and then the color of the hair mixed and painted on as soon as the water wash has soaked in; then the edges are softened down with the other brush. Care must be taken that there is no distinct line left round any edge. With the color of the hair still on the brush the eyebrows can be painted and the upper eyelid accentuated—the lower one should not be touched. Then the color is mixed for the eyes themselves and very carefully put in, so that the lights in them are not lost nor the expression altered. Now comes the most difficult piece of work for the beginner, the coloring of the cheeks and lips. The colors to be mixed are vermilion, carmine, or Indian red, and it must be put on as gently as possible, and the other brush—doubly necessary at this crisis—can soften the edges. The great thing, at this early stage, is to make the washes very weak, remembering that, though it is easy to add color to a platinotype print, it is a very difficult matter to take it away. Of course, with ivory it is different, but we have not got as far as ivory yet!

Perhaps now I have said enough to help the photographer to make a beginning in converting a photograph into a painted miniature. The only tools he requires so far are an ordinary paint-box of moist water-colors and a few sable-haired brushes of 2, 3, and 4 sizes.

After the first encouraging start comes the time for mistakes, and perhaps, before going further, I had better say a little on this subject. The most usual one is that color has been put on too strongly. I will take an example. A child is the subject. The complexion, hair, etc., have been washed in, and all looked going well, and then the red frock was colored, and directly everything else looked weak and washed out. The red was too vivid, and, as it were, overbalanced all the rest. An expert naturally would not make such a mistake; but supposing he had, he would correct it by deepening every other color in the print and by mixing such warm tones in his background that the red of the frock was worked up and so neutralized. However, as we are not experts, another method must be adopted, namely, by wetting the largest size brush, and wiping it carefully over the unlucky color. If this is done carefully and frequently, and the brush well rinsed in between, in time the color will be reduced; but under no circumstance must it be disguised by a layer of Chinese white, as this spoils the effect at once. Very often, in trying to render dark brown hair, we get too much color on to the print, and the lights and shades get hidden. If this is so, the quicker we get it off the better, because the difficulties in imitating these tones in paint are tremendous, and all our faking about is in vain; we only succeed in making the hair so unrealistic-looking that it resembles a mop or even a cap. We must remember to grasp every advantage the print gives us, and never to lose any of its suggestions by covering them with paint.

Another probable fault will be that our mouths have a hard, cut-out look, as if the lips had nothing at all to do with the face.

This can scarcely be called a mistake, because the mouth is one of the most difficult things to do, and I will try by a little explanation to smooth the way for the beginner.

In painting a mouth the photographer will have a chance in showing his kindly disposition, for the brush gives him the power of emphasizing faults, or hiding them; and so sensitive a feature is the mouth that the least little twist of the brush will do it. But if the miniature painter hopes for success, he must always beautify. The sitter must be seen at his or her very best. The mouth should be in the shape of a cupid's bow, and though a perfectly straight upper lip—fortunately one seldom sees it—cannot, and should not, be transformed by paint, yet the curves can very well be suggested, and its straightness rendered less conspicuous. Also, there is no need to reproduce the exact color of the sitter's lips; the brush need not follow so strictly in the camera's steps of realism, and anæmia is not recognized in miniatures! Let them be the healthy red of rose-madder or carmine mixed with vermilion. The upper lip has the least color, then a line of deeper red is drawn with a fine brush in a nice curved bow shape where the lips meet, and then the under lip is painted, if possible

with the least color in its middle to suggest the round. At the corners of the mouth a little shadow of the weak gray should be put on most delicately. This has the effect of showing the mouth really does belong to the face, and gives the worker the chance of ignoring drooping corners, which so spoil a face's expression ; and then, to finish, a faint gray shadow is touched in just under the under lip, unless it is already suggested in the print itself, and then the mouth is complete.

I would advise those photographers who are really feeling interested in converting their prints into miniatures to use a magnifying glass when painting the mouth. Even if they do not work with it, it will be found useful to see where the touches of the brush are too coarse and where more small touches are needed. I advise this more strongly because if the photographer—especially if he understands retouching—examines his work with a glass he will not be able to help adding the dots of paint that he sees are needed, and so he will be unconsciously teaching himself stippling — but I am anticipating, and must stop.

## THE LONDON PHOTOGRAPHIC SALON.

As the first show after the removal of the Royal Photographic Society's Exhibition to the palatial New Gallery, this year's Salon has a special interest. Last year there were photographic politicians who suggested that the new catholicism of the "Parent Society" had removed all excuse for a rival exhibition, and that the old Society was likely to welcome back to its fold those schismatics who had made the Salon possible and successful. Some even went so far as to prophesy that no other "Salon" would ever be held in this country. The Exhibition opening to-day, with its private view at the Dudley Gallery, Piccadilly, shows that the Linked Ring is full of vitality and is fully justified in continuing its separate display. The pictures are slightly more numerous than last year, in spite of the fact that for every one hung three were rejected. There is no predominance of any "School," as last year, when the Americans were particularly strong, and the feature of the Exhibition seems to be the taking of front positions by men who have hitherto been regarded as good second-raters. The acknowledged masters maintain their own standards, but none of them show anything really remarkable, while those of the next rank are very steadily levelling up. Mr. Craig Annan, who has had the Glasgow Exhibition on his hands, shows a worthy portrait of Professor Young, M.D., and two less satisfactory efforts. Mr. William Crooke, with two portraits, maintains his high standard of the past few years, but gives us no new idea. Among the men who forged ahead last year was Mr. Ralph W. Robinson, and this year he continues his advance, with a finely composed landscape, "Twitch-burning," and a notable portrait study. Mr. A. Horsley Hinton, continuing his experiments in a freer, breezier, and more optimistic treatment of landscape than he gave a few years ago, strengthens his position with one of the largest and most consistent collections on the walls. Mr. Reginald Craigie, touched by the best American influence, has a "Study in Tones" which is thoroughly good, as well as three or four portraits in his own old style.

Mr. Alexander Keighley is one of the strongest men of the year, with half a dozen large pictures, showing great advance and unexpected assurance in the treatment of varied subjects. Mr. Holland Day's "Street in Algiers" and "Au Passage" are new, and quite remove the haunting suspicion that Mr. Day had become fixed in one groove. They have all his mystery and delicacy of touch, with a virility absent from his recent work. Mr. Fredk. Hollyer's three portraits are a little disappointing, and Mr. George Davison does no more than maintain his old place. Mr. Charles Job and Mr. J. C. S. Mummery are well represented, but not up to their highest level. Mr. Harold Baker's three small architectural pictures are thoroughly good, as, in a totally different vein, are three Eastern architectural studies by Mr. E. R. Ashton. Among the Americans, Mr. Thomas M. Edmiston is a new and

welcome recruit, with a strong impression of Mr. Clarence H. White's influence, but with character of his own. The French school is again headed by M. Robert Demachy, who shows wonderful grasp of very varied subjects, and has a recruit, M. Ch. Sollet, whose two little pictures are well worth their places; while Dr. Spitzer's four subjects are welcome, not only for their intrinsic merit, but as being from a new Austrian exhibitor.

Altogether the exhibition is varied and interesting, with much that is suggestive and very little that can be described as weak, purposeless, or poor.—*The Standard.*

## REPRODUCING FAMOUS PAINTINGS BY PHOTOGRAPHY.

According to the St. Louis *Republic*, Mr. J. C. Strauss has in hand an ambitious attempt to reproduce certain famous paintings by photography, from living models posed with accessories approximating those used in the pictures to be copied. We quote from the *Republic*.

"St. Louis girls are to pose as models for the reproduction of famous paintings of women by Strauss. It is Mr. Strauss' intention to reproduce some of the old and valuable paintings now hung in the European art galleries by his new lytrit process. Already one young lady, well known in St. Louis art circles, has posed as a model, and the result is that the famous 'Duchess of Devonshire' painting by Gainsborough is reproduced by camera to resemble so closely an etching that it is not discernible to those not thoroughly versed in such matters that it is not an etching or possibly a fine steel engraving. Numerous famous paintings permit of such work, and Mr. Strauss says there are many pretty girls in St. Louis who will make perfect models for the reproductions. Miss Grace Massey, of No. 3515 Morgan St., posed for the 'Duchess of Devonshire' picture. The painting, it will be remembered, was stolen soon after its production by Gainsborough, more than twenty-five years ago. It was located in Chicago through the work of Pat Sheedy, the world's most famous gambler, who gave his word—this being sufficient—that the possessor of it would not be asked any questions, and would be paid a fabulous price if he would turn it over to Sheedy. Soon after this notice appeared Mr. Sheedy was informed of the whereabouts of the painting, and found it in Chicago. He paid for it, and asked the man who had it no questions, as had been promised. The painting was taken back to England, and J. Pierpont Morgan, the steel king, while in England recently, paid, it is said, $125,000 for it. The painting is now in Mr. Morgan's art gallery. Miss Massey, in posing for the picture, did not need much make-up for the part given her. In face, if not in figure, she resembles the handsome Duchess of Devonshire very much. She has the same expression of the large, beautiful eyes, and the profile of her face could scarcely be less like that of the original. The Duchess of Devonshire, being much older than Miss Massey when Gainsborough painted the now famous picture, was, of course, more portly, this making it necessary for Strauss to do additional work in portraying the figure of Miss Massey to resemble that of the Duchess. The work was done at considerable cost, but true love of the art would not permit Strauss to hesitate at expense. It will be of interest to women to know that the hat worn by Miss Massey in the picture cost alone $50. It is the famous Gainsborough hat, which became so popular soon after the recovery of the painting by Pat Sheedy. Miss Massey's hair needed but little coaxing to bring out the effect desired by Strauss to portray that of the Duchess. One of the latter's chief beauties, it is said, was her mass of blond tresses. Miss Massey is an artist. In miniature she has done much clever work, and she is now displaying true artistic ability in portraits. Among the famous paintings to be reproduced at some future date by Strauss through his new lytrit process is that of Mme. Le Brun, which is of herself and child. It is a painting of a mother holding in her arms a beautiful child. The painting is now exhibited in the Louvre at Paris. For a model for this painting Mr. Strauss will select possibly one of St. Louis' handsome mothers and

her child, it being necessary to have for a model a woman nearing the middle age. Then there is Titian's 'Flora,' a handsome brunette in plain white gown, holding a huge bunch of flowers. This picture is the delight of artists visiting the Florence Art Gallery. The model, while a very beautiful girl, is not considered so pretty that a St. Louis girl cannot take her place before the Strauss camera. Joshua Reynolds' 'Mrs. Siddons,' posing in a tragic mood, is another that will be reproduced by Strauss. The Nell Gwynne painting, Reubens' portrait of his wife, Franz Halz's portrait of the Burgomeister's wife, Greuze's 'Broken Pitcher,' Sargent's portrait of a child with parrot, one of Velasquez's famous paintings, and Vandyck's 'Woman and Child,' now in the Louvre, are among the subjects to be worked up through the lytrit process, St. Louis women as models. Fred. L. Stoddard and Charles Winters, both instructors in the School of Fine Arts at Washington University, have examined the portrait posed for by Miss Massey as the Duchess of Devonshire. Both were delighted with it as a work of art. Mr. Winters said: 'It is one of the finest things in that class I have ever seen. Its softness of light is something remarkable. I had not dreamed that such work could be done with a camera. It has the quality of an engraving and an etching combined.' Mr. Stoddard said: 'The possibilities of this kind of work depend solely upon how it is carried out. In the first place, the conception of light, shade, and detail must be very particularly looked after, as is so successfully done with the picture of Miss Massey in the Duchess costume. It is not only artistic, but absolutely accurate, so far as likeness is concerned. I want to see more of it.' Miss Massey, as an artist, was delighted. 'I had not expected such work could be done with a camera,' she said. 'Mr. Strauss and other of my friends thought I would make a desirable model for the reproduction of the Gainsborough painting, and I accepted the invitation to pose. I think the work truly wonderful, and have heard of nothing like it ever being done at any place but in St. Louis.'"

## HINTS FOR THE DARK-ROOM.

*Labels.* An ordinary gummed label soon comes off in the frequently damp atmosphere of the dark-room. Sized and varnished it will last as long as the bottle, practically. The writer has had such labels in use for years in the acid-laden atmosphere of a chemical laboratory without their showing signs of leaving their supports. Use a thin paper, make the bottle dry, and rub the gummed and moistened label down. Then apply a coating of size (1 part of glue in 10 parts of hot water), and, when quite dry, varnish with an "oak" or "church" —*i. e.*, a varnish containing linseed oil. Spirituous varnishes (as used for negatives) do not last so well.

For attaching the labels a mixture of glue and gum is better than gum alone. Here is a good formula which is easily made up: Soak 1 part of the best glue in water until thoroughly swollen, add a little sugar candy, 1 part of gum-arabic and 6 parts of water. Boil with constant stirring over a spirit lamp until the whole gets thin. The mixture does not keep; coat sheets of paper with it, let dry and cut up into convenient sizes.

*Ground-glass labels.* One of the best methods of labelling is to dispense altogether with paper labels, and instead to grind a patch on the bottle with emery powder. The formula can be written on the ground portion with lead-pencil. The ground patch is made in a few minutes with a piece of moistened emery cloth, aided by a little emery powder. The writing is removed without any difficulty by rubbing with a piece of hard rubber. It does not wear away or become illegible in use. A coat of varnish can be applied to the patch and the writing thus made quite permanent. But the convenience of the method lies in always having the label at hand (as it were) without having to look around for paper or gum. Large bottles of stock solutions should be labelled in big, bold letters, HYPO, ALUM, etc., in Brunswick black

or other good varnish paint. A solution of ordinary sealing-wax in methylated spirit is as good as anything. Grind the wax, first alone and afterward with the solvent, before applying.

*Cleaning bottles.* I could easily fill pages with directions for cleaning bottles which have contained this or that chemical. But it does not pay to spend time over such business. If water does not clean the bottle right away, try shaking a little hydrochloric acid in it; if this is of no use, shake up (still with the hydrochloric acid) with shot, or small coal, or coarse sand or something which will scrape the impurity off the side. If this fails, cast the bottle aside as useless.

*Solutions that do not keep.* The permanence or otherwise of a solution is a matter of conditions—generally whether the air gets access to the liquid or not. Two methods of preserving solutions from the action of the air are worth bearing in mind. The first is to store the solution in a lot of small bottles, say 4-ounce capacity, each filled to the lip and well corked. The second is to store the solution in a bottle with a cork at the bottom such as is described above, and to pour a layer of "heavy" paraffin oil on the top of the solution. The oil, although designated heavy, is lighter than water, has no action on any ordinary solution, and effectually excludes the air.

*Bottles for developer.* The bottles for one's set of solutions—*e. g.*, pyro, bromide and alkali, may very fitly be selected of distinctly different size and shape, so that they cannot be mistaken in the rosy gloom of the dark-room. As suggested some time ago, the bottle proposed for poisons and in shape like a fashion-plate young lady—*i. e.*, nipped in at the middle—might be adopted for pyro were it not to be feared that by a natural association of ideas the photographer might pass from clasping of the waist to pressing to the lips—with disastrous results.

*Accuracy in weighing.* There is such a thing as needless accuracy. It is no good weighing chemicals more accurately than the solutions containing them can be measured. From tests which I got some careful photographic friends to do in conjunction with personal tests some time ago, I found that in broad daylight their measurements of solutions (1 or 2 ounces) varied about 1 per cent (1 in 100) on either side of the truth —*i. e.*, total error of 2 per cent. Hence, weights can be safely just as inaccurate—but not more so. This means that an "ounce" of, say, potassium bromide may be 4.37 (1-100 of an ounce) more or less than an ounce without "cutting any figure." In other words, it may be 441.8 or 433.1 grains. This means that the trouble of finally adjusting the weight to one-half a grain is simply wasted. When small quantities, 20 grains and less, are being weighed the greatest accuracy must be observed.

*Weighing in semi-darkness.* The glass measure has an aptitude of eluding one's vision in the dark-room. It is forced to reveal itself if we provide it with a coating of white enamel paint on its foot and around its upper outside edge. This is one of those absurdly obvious hints which the erudite miss.

*When pouring from a bottle.* Two last hints ought to be so borne in mind that the practice of them becomes habitual. Always keep the label uppermost when pouring from a bottle, so that if any liquid trickles down the side the label misses it. Result—your labels keep clean and legible for much longer. Secondly, if you want to deliver drops (or a very small quantity) of liquid, just moisten the lip of the bottle with the finger. The fluid then trickles out without having to overcome the resistance of a dry patch.

*Using solutions.* Under this general heading I want to say some useful things about such things as adjusting temperature, rocking solutions, cleaning dishes. As the last is a necessary preliminary (frequently) we may take it first.

*Cleaning dishes.* Dirt, according to the famous definition, "is matter in the wrong place," which is very true in photography, where dirt may be various in kind. I am going to name two reagents for its removal: commercial hydrochloric acid and paper. Commercial hydrochloric acid is a solvent of many precipitates, sediments, deposits,

which are not removed by water, and it is pretty safe to say that what is not removed by it must be rubbed off by the second reagent. Keep the spirit mixed with an equal volume of water, and see that you do not splash any of it (neat or diluted) on clothes or upholstery, for it leaves a rotten and stained patch as a memento of its visit. Dishes, measures, etc., if rinsed out once or twice with this liquid are easily made quite clean, as a general rule. Moreover, it decomposes hypo, and thus renders innocuous, as regards subsequent use, any dish which has been used for fixing. If the dish be of porous material (*e. g.*, granatine, "porcelain"), and cracked, it is not safe to assume this, for the hypo or the acid is removed from the cracks with difficulty, though it may do so subsequently sufficiently to cause stains in, say, toning collodio-chloride prints. Moral: Keep your cracked dish, if you must keep it at all, for one particular purpose.

If the acid will not remove any stain, brisk rubbing with a tuft of any kind of paper will almost always do so. I know of no better way of cleaning right into the corners of dishes than this.

*When and when not to filter.* Do not filter if you can do anything else. It is better to let any deposit settle (if it will) and pour off the clear liquid above it. You should never filter solutions containing pyro, hydroquinone or other developers which oxidize readily, because filtration exposes the solution so freely to the air. If it is necessary to filter it should be done before the pyro, etc., is added.—*The Photo-Miniature.*

## AN IMPORTANT ENGLISH COPYRIGHT CASE.

HILDESHEIMER *vs.* W. F. FAULKNER, LIMITED.

["Times" Report.]

THIS was an appeal against a decision of Mr. Justice Kekewich as to the amount of the penalty to be inflicted under section 6 of the Fine Arts Copyright Act, 1862, for an unauthorized circulation by the defendants of printed copies of twelve pictures, of the artistic copyright of which plaintiff is the owner. The pictures are used in connection with packets of cigarettes. The action was brought to restrain the infringement of the copyright by the defendants, and on May 22, 1900, an injunction was granted restraining the defendants from selling or distributing prints of the twelve pictures, other than those made by the plaintiff, and an inquiry was directed to be made in chambers how many copies of the pictures printed by certain other named persons for the defendants had been put in circulation by them. The Master, by his certificate, found that 1,012,600 copies of the pictures printed for the defendants by the persons named had been put in circulation by the defendants. By section 6 of the act "if any person, not being the proprietor for the time being of copyright in any painting . . . shall, without the consent of such proprietor, repeat, copy, colorably imitate, or otherwise multiply for sale, or knowing that such repetition, copy, or other imitation, has been unlawfully made, shall sell . . . any copy . . . of the work . . . such person for every such offence shall forfeit a sum not exceeding £10." The plaintiff took a summons for the determination of the amount of the penalty to be paid by the defendants. The questions were: (1) Whether the order for the printing of a million copies constituted a million offences or only one offence; (2) whether if each copy constituted a separate offence, the penalty should be fixed at 1 farthing for each copy put in circulation, which would amount in the whole to £1054 15s. 10d., or whether it should be fixed at some smaller fraction of a penny for each copy. Mr. Justice Kekewich said that according to "Ex parte Beal" (L. R., 3 Q. B., 387) the plaintiff was entitled to a penalty for each copy circulated. But his lordship thought this penalty must be some recognized actually existing sum, and not merely

a sum which could be expressed in figures, but did not represent any actually existing coin of the realm. His lordship, therefore, felt obliged to fix the penalty at a farthing for each copy, though he would have been glad if he could have avoided coming to a conclusion which would give an extravagant amount for pictures which were of merely ephemeral value. His lordship stayed execution pending an appeal, on the terms of the defendants paying £200 to the plaintiff, and paying the rest of the amount into Court. The defendants appealed. It was stated that the cost of producing a million copies of the pictures was only about £100.

Mr. Warmington, K. C. (with whom was Mr. A. J. Walter), for the defendants, argued that the order given by the defendants for a million copies constituted only one offence, though he admitted that "Ex parte Beal" was a decision to the contrary. But he contended that the Court was not bound by section 6 to impose a penalty of at least a farthing for each copy circulated, even if a farthing must be taken to be the lowest coin of the realm. It appeared from the *Century Dictionary* that up to 1854 half-farthings were coined, and were in circulation. There was formerly a coin called a "mite," which was said to be one-sixth of a penny. In the year 1330 a petition was presented to the Crown, asking that a smaller coin than a penny might be issued from the mint, on the ground that a penny would purchase three gallons of beer. The learned counsel argued that there was no reason why the Court should not fix any fraction of a penny it might think fit in such a case as the present, in which one claim was made in respect of the million offences, and there should be only one execution for the total sum awarded. The Court must have a discretion to give the right penalty in respect of the subject-matters brought before it, provided that not more than £10 was given for each offence. The Court might give a lump sum, and was not bound to apportion a certain sum to each offence.

Mr. Warrington, K.C., and Mr. C. A. Russell, K.C. (with whom was Mr. Hildesheimer), for the plaintiff, contended that on the true construction of section 6 a definite sum was to be forfeited for each offence, and that sum must be represented by some existing coin of the realm. This case must be treated as if there were a million actions, one for each offence. That was in accordance with the view of the majority of the Irish Court of Appeal in "Green *vs.* the Irish Independent Company" (1899, 1 Ir. Rep. 386).

The Court allowed the appeal.

Lord Justice Rigby said it had been agreed that if the Court considered that the plaintiff was not entitled to the amount given by the learned Judge they were to retain the sum of £200 which had been already paid to them. In his lordship's opinion, the Court was not bound to fix a sum made up of the separate sums which would have been recovered if there had been a separate action for each offence. In his lordship's opinion there was no such necessity. In his opinion £200 was a proper sum to give, and it was not necessary to go through the operation of adding up all the sums which would have been given if there had been a separate action in respect of each offence.

Lord Justice Collins was of the same opinion. The defendants were technically within section 6, and they had become liable for penalties in respect of a million copies of the pictures. It was admitted that there were a million offences, and that a million penalties had been incurred. The question was, At what rate were the penalties to be fixed? Section 6 spoke of a "sum" not exceeding £10. The penalty must be between £10 and something else. It was said that that something else must be a "sum" and that a "sum" could not be that which had no equivalent in the coinage of the realm; and the learned Judge had given effect to that contention, and had held that he was bound to assess the penalty at not less than a farthing for each offence, though his own view was, if he had felt at liberty to follow it, that the aggregate amount of the penalties ought not to exceed £200. But he held that he was bound by authority to assess the penalty at not less than a farthing for each offence. Was there, then, anything in section 6 which compelled the Court to do that which would be a great injustice? The late Lord Esher in "Tuck & Sons *vs.* Priester" (19 Q.B.D., at p.

638) said, with reference to section 6: "We must be very careful in construing that section, because it imposes a penalty. If there is a reasonable interpretation which will avoid the penalty in any particular case we must adopt that construction. If there are two reasonable constructions we must give the more lenient one. That is the settled rule for the construction of penal sections." In the present case the action was brought not in respect of one infringement, but in respect of a million; there was one judgment and one sum was recovered, though it was assessed with reference to each offence.

There was no question of levying more than one sum, and there was no necessity for the purpose of levying execution to assess any particular sum in respect of each offence. As was pointed out by Lord Justice FitzGibbon in "Green *vs.* The Irish Independent Company" (at p. 392), the only reason for fixing a farthing as the minimum of damages is "because execution cannot be issued for less." But when there was no necessity to issue execution for that sum, what necessity was there for fixing the penalty at a sum which was represented by a coin? His lordship could see no reason why in such a case the penalty should be limited with reference to a coin. In the present case the execution could be only for the aggregate sum, and his lordship could see nothing in the statute to prevent the Court from giving an aggregate sum. The decision of the Irish Court did not bind this Court, though this Court would treat it with the greatest respect. But in that case Lord Justice FitzGibbon dissented from the majority, and took the view which he (Lord Justice Collins) was now taking, and he preferred the reasoning of Lord Justice FitzGibbon to that of the other two Judges. It was suggested, though this was not pressed by the appellants' counsel, that there was only one offence in the present case. So to hold would involve overruling the decision of the Court of Queen's Bench in "Ex parte Beal," which has stood for a number of years, and it could not be overruled now, even if it were not, as his lordship thought it was, a right decision. In two other cases decided by Mr. Justice Charles and Mr. Justice Wright the point now taken appeared not to have been raised. Now that it has been raised, his lordship, for the reasons given by Lord Justice FitzGibbon, was of opinion that the Court was not bound to fix the penalty at a farthing for each offence. He could see no reason in the words of the statute or in common-sense for so doing. The Court was not limited by the standard of coinage existing from time to time. His lordship thought that judgment ought to be reversed. In deciding as he did, Mr. Justice Kekewich felt himself bound by a decision which did not bind this Court.

Lord Justice Romer agreed. He should have been sorry if this Court had felt bound to affirm the decision of Mr. Justice Kekewich, especially as the Court would then really have been doing that which the learned Judge would not have wished to do had he not thought that he was bound by authority to do it. If the plaintiff was right, the act would lead to great hardship. The Court might be bound to award a sum which would obviously be far in excess of what ought to be given. And the judgment would be doing that which the act had carefully avoided doing, viz., fixing a minimum penalty, when the act had only fixed a maximum. And, moreover, the sum to be awarded would fluctuate according to the coinage of the country for the time being. These reasons showed that if the Court was not bound to do so it ought not to put such a construction on the act. His lordship thought the Court was not bound to do that. He agreed that the Legislature did regard each unauthorized copy as constituting a separate offence, and he agreed also that the sum awarded ought to be one which was recognizable and would form the proper subject of execution. But why was the Court bound to fix a sum beyond what it thought just, when the action was brought to recover penalties for a number of infringements? So long as the judgment was for a sum for which execution could be levied, was there anything which bound the Court to give for each offence an amount represented by a recognized coin, and not less than one farthing? His lordship could not think that this was the right construction of section 6. The section did not fix a minimum and did not speak of any coin; it only said "a sum not exceeding

£10." His lordship could see no reason why, when the action was brought for a number of offences, a sum should not be given which, when divided by the number of offences, would give for each a fraction of the lowest coin in the realm. It was said that the Court had no power to do this, because, when the action was brought for a million offences, it must be treated as if there had been a million actions. His lordship declined so to treat it. And even if it were so treated it by no means followed that the Court would be bound to give a million judgments. So long as the judgment was in proper form, his lordship could see no reason why it should not be for one aggregate sum, even though that sum, if divided by the number of offences, would give for each offence something which was not recognized as a coin of the realm. But his lordship was not satisfied that a farthing was the least coin recognized in this country.

## NEWS AND NOTES.

*The Napoleon of Photography.* Mr. Louis Langfier has been so called, and deserves this proud title. Mr. Langfier comes of a long line of people interested in art, and he believes that the photographer, like the poet, is born, and not made. He considers that the photographer who has mastered the art of lighting his sitter has practically nothing more to learn. Mr. Langfier, at his studio in Old Bond Street, is making a specialty of miniatures, his prices ranging between 25 and 250 guineas. Photographic miniatures on opal cost about six or seven guineas. He regards the revival of the miniature as something more than a passing craze, being rather the natural outcome of modern artistic culture. His clients are numerous, including Princess Blücher, Princess Dolgorouki, Princess Demidoff, Countess Cadogan, the Countess of Hopetoun, the Countess of Mar and Kellie, Lady Randolph Churchill (Mrs. Cornwallis West), Lady Isabella Howard, Viscountess Falmouth, Lady Gerard, Mrs. Arthur Paget, Mrs. Edward Milner, Sir George White, General Cummins, E. V. Stannard (John Strange Winter), Mr. I. Zangwill, Mr. Henry Lucy ("Toby," of *Punch*), Mr. Pinero, Mr. Beerbohm-Tree, General Baden-Powell, General Sir Redvers Buller, etc.

*Plenty of Photos.* "Would you be kind enough to return my photograph?" she wrote. "I gave it to you in a moment of girlish folly, and I have since had occasion to regret that I was so thoughtless in such matters." Of course, she pictured that photograph framed and hung up in his room, and was inclined to think that he would part with it with deep regret. Just why she wanted it returned is immaterial.

Of course, he had offended her in some way, but it is unnecessary to inquire how. The reply to her note came the following day:

"I regret," it read, "that I am unable at this late day to pick out your photograph. However, I send you my entire collection, numbering a little over 600, and would request that you return all except your own by express messenger at my expense."—*Tit Bits.*

*A Velox Developer* which has good keeping quality and works well is:

| | |
|---|---|
| Metol | 75 grs. |
| Hydroquinone | 100 " |
| Sodium Sulphite | 4 ozs. |
| Sodium Carbonate | 2 " |
| Water to | 20 " |
| Potassium Bromide | 30 grs. |

For use mix with an equal quantity of water.

*The British Optical Journal* is a new monthly, dealing with the subjects indicated in its title, published by Marshall & Brooks, Harp Alley, Farringdon Street, London. The first issue contains many interesting and useful papers, and the new journal has our best wishes for its success. Price, 6d. (15 cents) monthly.

*A reader* at present travelling in Europe sends us a curious advertisement. It reads: "Be your own photographer. Outfits, 2c., 4c., 80., 12c., 24c., 60c. and upward each. Success guaranteed; failure impossible." The 2c. is struck out with a pen, from which we gather that it now costs a minimum of 4c. to become a photographer. Great is art.

# EDITOR'S TABLE.

OBITUARY.—We regret to announce the death of Dr. ERNST VOGEL, the talented son of our old friend, the late Prof. W. H. VOGEL, of Berlin, which took place August 28th. Dr. ERNST VOGEL was well known for his researches in photographic chemistry and tri-color reproduction. A few years ago he visited this country in connection with the commercial introduction of a three-color half-tone process, the outcome of which was hardly as successful as he anticipated. Since the death of his father Dr. VOGEL had editorial charge of *Photographische Mittheilungen*, and to that paper he contributed liberally of his vast store of technical information.

---

THE GUERIN COLLEGE OF PHOTOGRAPHY, St. Louis, seems to be meeting with the prosperity it deserves. The new catalogue issued by the College displays its facilities at length, and should be seen by those who feel the need of expert help in special departments. From the bulletins of progress coming to our table a large proportion of the students of this College consist of professional photographers already in business, who enroll themselves to secure greater proficiency in this or that neglected branch of work.

---

THE PHOTOGRAPHER'S ADVERTISING.—For more years than we care to recall we have insisted on the advantages of advertising for photographers as a means of securing new business and enlarging the demand for one's work. It is a pleasure to announce that we have secured a series of special articles on "Advertising," by Mr. CHAS. P. MARSHALL, of Cazenovia, N. Y. Many of our readers will remember Mr. MARSHALL as a photographer of unusual ability. Of late years he has given much study to advertising as a profession, utilizing his knowledge as he went along to extend his photographic business. In this he was so successful, practically doubling his volume of business within a year after beginning to advertise, that he has taken up the preparation of advertising as a specialty. His articles in these pages will be found full of useful information, and we commend them to the attention of all our readers. The advertising service supplied by Mr. MARSHALL, as announced in our advertising pages, should not be overlooked. The opportunity he offers is restricted to one photographer in each town, which makes his service one of special value.

---

A HAPPY feature of the convention at Detroit was the kindly thought which secured the services of JEX BARDWELL at the lantern exhibitions. Mr. BARDWELL is an expert lantern operator, and we are glad that his usefulness was recognized. The making up of a purse for Mr. BARDWELL, in which Mr. and Mrs. CRAMER and the ladies on the excursion had a big share, was another happy feature of the Detroit meeting deserving of mention.

---

THE demand for WILSON'S *Cyclopædic Photography* and WILKINSON'S standard work on *Photo-Engraving*, etc., has made it necessary to print new editions of these well-known manuals, which will be ready in a few weeks. Considering the popularity of smaller priced books on photography of late years, this continued demand for our publications seems to prove that the best is still the cheapest. We know of no better gift-book for the approaching Christmas season than a copy of *Cyclopædic Photography*. It is a complete photographic library, embracing over 2500 items in a single, handy, well-bound volume. In order to meet the desires of our subscribers in this we have made special arrangements whereby we can offer WILSON'S *Cyclopædic Photography and a year's subscription to this* MAGAZINE for $6, provided the two are ordered at one time, and cash accompanies the order. This special offer expires December 31st, and applies to new subscriptions or renewals. Don't lose the opportunity.

---

AN ACKNOWLEDGMENT.—We inadvertently omitted in our last issue to make well-deserved acknowledgment of the remarkable accuracy of the official report of the National Convention made by Mr. DOUGLAS A. BROWN, of Cincinnati. Mr. BROWN is without doubt the most competent stenographer yet employed by the National Association, and his promptness in furnishing copies of the report, together with its unusual accuracy, deserve the warmest praise. We hope that his services will not be overlooked in arrangements for future conventions. The department could not be in better hands.

---

THE last two numbers of *The Photo-Miniature* are of unusual interest to professional photographers, comprising practical hand-books to "Flashlight Photography" and "Photographing Interiors." Price, 25 cents each. Messrs. TENNANT & WARD, the publishers, deserve much credit for the publication of the useful little books embraced in *The Photo-Miniature* series. We know of no other series at once so handy for ready reference and so extremely useful to photographers.

---

THE *Gray-Day Developer*, introduced by the NEW YORK PHOTOGRAPHIC CO., 159 W. 80th St., New York, is a specialty which deserves the attention of all who are seeking an economical and reliable developer. We have put this developer to many severe tests during the past few months, and find we can recommend it with confidence as one of the best ready-to-use developers on the market. It is easily and completely controllable, gives a good printing negative, and may be used repeatedly without loss of power.

Trade- A.G.F.A. Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin S.O.**

Photographic Department.

Manufacturers of:

# AMIDOL, Patent Developer.

**AMIDOL** is supplied in the form of fine, sparkling, little crystals.

**AMIDOL** is a **quick** and **powerful** developer, bringing out **all details** and giving **good density.** The chief characteristic of this developer is its power in conjunction with Sodium Sulphite **without the addition of other alkalies.**

The bad effects of a strong alkali such as Potassium Carbonate or Caustic Potash, whether it be on the operator's hands or on the delicate sensitive material, is therefore avoided.

**AMIDOL** ranks in a premier position for **developing Bromide paper,** giving **excellent gradations** and the **deep blue black** deposit so much sought after, without stain.

| 1 oz. | 4 oz. | 8 oz. | 16 oz. |
|---|---|---|---|
| $ 0.75 | 2.75 | 5.25 | 10.— |

## AMIDOL, ready for use,

### in Cartridges or Glass-Tubes:

Per box of ten, giving each 200 ccm. solution: $ 1.50.

**N.B.** **To Tourists** and others these cartridges form a simple and reliable method of making up a developer ready for immediate use, each simply requiring dissolution in **seven ounces of water. Note the quantity of solution made when comparing prices.**

## Pamphlet on Developers (2d edition 1900)

containing in 20 pages detailed description and instructions for use.

**Free on application**

through all dealers or through the following importers:

**E. & H. T. ANTHONY & CO.,**
122 & 124 Fifth Avenue, 17th and 18th Streets, NEW YORK.

**MALLINCKRODT CHEMICAL WORKS,**
ST. LOUIS, MO., and 90 William Street, NEW YORK.

**THE SCOVILL & ADAMS CO., OF NEW YORK,**
3 & 5 West 19th Street, NEW YORK.

**GEORGE MURPHY,**
57 East 9th Street, NEW YORK.

**G. GENNERT,**
24 East 13th Street, NEW YORK.

RODINAL

EIKONOGEN

**Sold by all dealers.**

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

# DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.


AMERICAN PROFESSIONAL PORTRAITURE . . . . . 417
PRACTICAL ADVERTISING. By Charles P. Marshall . . . . . 418
DIAPHRAGMS AND THEIR NOTATION . . . . . 420
PRICES AND QUALITY . . . . . 423
THE CRAVING FOR BUSINESS . . . . . 424
WARM-TONE LANTERN SLIDES. By George E. Brown . . . . . 427
THE VAN LOO STUDIO AT TOLEDO . . . . . 433
A PICTURE OF PATHETIC INTEREST . . . . . 434
AGFA-INTENSIFIER. By Professor Rodolfo Namias . . . . . 434
MINIATURES. By Carine Cadby . . . . . 437
PHOTOGRAPHIC PHILOSOPHY . . . . . 438
A METHOD OF MOUNTING PHOTOGRAPHS . . . . . 441
THE MAN BEHIND THE CAMERA . . . . . 442
THE PERMANENCY OF PLATINUM PAPER. By Chapman Jones . . . . . 443
SINGLE LENSES FOR ARCHITECTURE. By H. Penner . . . . . 445
JOHN BULL AND HIS TRADE . . . . . 446
ELEMENTS IN BUSINESS SUCCESS . . . . . 447
DEVELOPING FORMULÆ FOR USE WITH LOVELL PLATES . . . . . 449
PLATINOTYPE DEFECTS AND THEIR REMEDY . . . . . 451
NOTES ON CHILD PORTRAITURE. By John A. Tennant . . . . . 454


OUR PICTURES:

"A Picture of Pathetic Interest," Engraved from a Copyrighted Photograph by George M. Edmondson, Cleveland, Ohio.
Full Page Engravings from Photographs by Louis Walker, Pach Bros., D. Rosser and others.


EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N.Y POST OFFICE AS SECOND CLASS MATTER.

practical demonstration; compare it with any photographic paper published anywhere, and you will agree that WILSON'S is incontestably the best of trade journals for the photographer who wants to know and to grow.

Three dollars paid in advance will bring you twelve numbers of the *Magazine* as good as this. Where can you get better value for your money? One dollar for 4 months. Current number 30 cents.

---

**EDWARD L. WILSON**

**287 Fourth Ave., New York**

Senator Hanna  Mrs. Merriam  General Alger  Miss Phelps  Hon. W. B. Merriam  Mrs. McKinley  The late President McKinley  Miss Merriam  Miss Barber  Mrs. Hanna

A PICTURE OF PATHETIC INTEREST

Copyrighted by George M. Edmondson, Cleveland

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. NOVEMBER, 1901. No. 539.

## AMERICAN PROFESSIONAL PORTRAITURE.

No review of American work can be considered complete which ignores the many virile professionals. A few years ago, when what is now sometimes spoken of as the "new" school of American portraiture was evolving, there was hope that a joint upward movement of professional and amateur work would take place. The hope did not materialize, though some of the sincerest and most discriminating admirers of the amateur movement were to be found among the professionals, and *vice versa*.

The "new" movement was inevitable, of course, in a land of progress, but I believe the first strong impulse which broke it away from mere evolution was due to the serious financial strain of some eight years ago. Photographers were hard hit in those days, and some of the more progressive of the younger, and therefore the unknown men, felt that there should be a more excellent way than price-cutting to meet the stress of money famine. Broadly speaking, the new school is noticeable for its striving after pictorial or painter-like effects in its work, as distinguished from a close cleaving to technical or chemical quality. At the same time the new school, so far at least as it is represented in those men who have gone through the mill of plain professional work, is almost without exception thoroughly good photographically.

Some of those who have drifted in from the amateur side are weak in technique. There is no line of demarcation separating the new school from the old. Many men at the top of the tree are frankly and avowedly on old lines; certainly the wealthiest men and the largest businesses are; and the old and the new mutually appreciate the good in the other. Among the many workers in "straightforward plain portraiture," four names are by universal consent quoted—Falk, Stein, Steffins, and Strauss. In each of these cases the output of work is large, and a high quality is maintained, and the work from each studio is distinctive and recognizable. In this strong impress of individuality, the old and the new here join hands. Their comparative lack of the "firm" element, and the sure sign of "the *man* behind the gun" is one of the happiest features of American professional work. The "new" school had its inception in the country towns. Ohio was particularly noticeable for the number of able men which it a few years ago sent to success in large cities.

The Ohio men worked and discussed and learnt much at their own convention, where they compared work and experiences. In this they were typical of American photography, where co-operation has ever taken the place of distrust. This feeling of co-operation—of fraternity—has just resulted in what is spoken of as "the educational convention." At this year's national meeting the photographers boldly abolished all distinctions of classes or sections, and all medals or selections by judges. It was felt that the competitive element frightened many of the smaller men who might wish to exhibit, and that it excluded some of the strongest men, who very naturally do not care to exhibit in direct competition. The

decision seems to have been justified by the result; and a very strong showing of work—though lacking somewhat in those special lines and sizes which the average photographer sells—was brought together. [An extract from the review of "American Photography" in *Photograms of the Year* 1901.]

# PRACTICAL ADVERTISING.

## The Kind that Brings Business.

BY CHARLES P. MARSHALL.

TALK NO. 3.—KEEPING UP WITH YOUR ADVERTISING.

YOU'VE looked the field over, and begin to believe in practical advertising—newspaper advertising—*printer's ink!* You've decided how much of an appropriation you can make for the next six months or year, and have closed contract with the paper or papers you have elected to use.

Right here take this advice—it's been proven in all lines of business, viz., before you run your first ad., CLEAN HOUSE! Yes, clean house; get into ship-shape; have nothing about the studio to offend the eye of the most fastidious. Remember, first impressions are lasting in the eyes of customers—the first glance "sets the pace" and establishes the precedent in their alert estimation.

Your first advertisements are, or should be, cordial invitations to visit your studio. You bid the public to pull the latchstring—to come in and see your good cheer in shape of artistic pictures, cozy, inviting rooms, spic and span clean.

Postponement of this initial duty is almost fatal to success, and if neglected will take months of persuasion to turn the tide your way again. Bear in mind that you have issued a special summons to friends, acquaintances, and the general public to see you at your best. Now, see that you *are* at your best—"decks cleaned," ready for inspection!

When you are asked to the wedding-feast, you expect everything to be in readiness. But what a disappointment sweeps your face if the bride and groom appear in shabby clothes, the cake not even made, table set, or presents unpacked. You'll be polite enough to stay a few minutes, then go, and on your way home mentally and materially cut them off your list.

It matters not whether you're making photographs, selling pianos, or vending peanuts, you *must* be prepared for the crowd. Don't wait till people who have read your cordial, inviting ad. come flocking in to size you up, and you have to apologize for incomplete decorations, pictures not in place, and rooms untidy. The photographer who constantly postpones "fixing up," and is always apologizing with "No time to make new samples," "Too busy to keep clean," better go hide, and let some progressive man or woman squeeze the bulb and persuade the customers.

Speaking of women under the skylight, they're fast coming to the front, and in a few years you'll see scores of studios conducted by women, progressive ones, too, holding trade, and getting more. Women love and practice order and cleanliness—their bright, wholesome, inviting studios command respect and liberal patronage.

It has been wisely said that "an ad. is the star of the mercantile drama." Now, no star, however scintillating or resplendent, can hold an audience if the support is "rotten." Exactly so with an ad.; it may fairly glisten with enthusiasm over the work and wisdom of your studio, and the latter be a mess of musty old samples, fussy furniture, with dust and grime skulking in the corners. Then your poor prima donna, your ad., is a dead fizzle, and in the patois of the gallery god, "your name is Dennis." Demise, rather, for you'll surely die a financial death from lack of patronage, and be buried in oblivion. Epitaph apropos would be, "He meant all right, but was too short-sighted, shiftless, lazy, and procrastinating to be progressive.

Moral—Be up to date, not down in dirt.

However attractive an ad. may look and read, all the adjectives in the English

tongue won't atone for poor goods, indifferent service, and an untidy studio.

But some lukewarm artist murmurs, "Oh! I hate to start in to advertise. Takes so much time and trouble to get ready, write the ads., and keep the samples changed." *Thunder?* Go jump in the lake—we'll pay for your funeral! If you haven't energy, go to a gymnasium for a few fencing lessons and a course in boxing. 'Twill stir your sluggish blood and coax your languid liver into life.

Begin with yourself. Dress the best you can afford. Have stylish, sensible clothing for everyday wear. It's no economy to wear a six-dollar sleazy serge six days in the week, then creep into a forty-five dollar diagonal on the seventh. You'll do more business, gain more friends, command more attention, hold your own, and make more money if you invest $20 or $25 in a bright, stylish business suit. You may be all taken up with "beautiful light effects;" heart and hand may idolize "fine negatives," and still drive away trade by an indifferent attire. Laying aside personal taste, it's a sound business investment, sure to win, if you devote a few dollars to well-fitting, stylish clothing, bright cravats, fresh linen, and shoes that *shine?*

Days of eccentricity are over. The present is purely a business age, whether you relish it or not; and if you succeed, you must "do as Romans do," *advertise*, and live up to it!

I once visited a gallery in a small town. Its owner was a good photographer, and in earlier days was the oracle of art in that section. Even now he can light a head and build a negative that will give many a youngster in the craft the green eyes of envy. But, bless his soul, he's nearly "all in"—pardon the phrase—that everlasting dressing-gown, slippers, plush cap, and Samsonian hirsuteness have pronounced him passé in the eyes and orders of a once patronizing public. His former customers now go to the neighboring city for their portraits.

Where to begin your house-cleaning? *Anywhere* about the premises. Tackle the skylight-room first—lots of light there, and easier to see the sins of neglect. First, cut down those faded old, coffee-colored curtains. Put up fresh white ones in the skylight and at sides. Treat the windows to a bath outside and in. Have the woodwork washed; repaint, paper, and varnish. Burn up the antiquated balustrade and gimcracks. Use solid furniture in your pictures. If you haven't suitable pieces, borrow or rent them from the furniture store. The genuine article composes easier and looks better in the portrait than one of those impossible papier-maché nightmares of the Renaissance. Rip off the dingy camera-cloth—a new one costs but a trifle, and will set you up 10 per cent. in the estimation of the next sitter! Paint and varnish the floor, that it may be washed and wiped each morning. Sure, it's a trouble to do it, but it pays a big dividend. (If more photographers knew what a sinking fund there is in the despised mop-pail, we'd hear less grumbling over "hard times!") Neglect the floor, and some unexpected time a lady comes in for a sitting in a train dress, and unconsciously wipes up your floor with her immaculate skirts. But only once—pictures or no pictures, she doesn't come again. Your advertisement said your studio was "clean and inviting," she proves to herself and friends by perhaps a ruined gown that your ad. was a lie, and "even to be asked into such a dirty den was an outrage!" That Prince of Picture Makers—dear old Sir Joshua—had sense enough aside from his greed for gain to keep his studio "clean and in fit condition to receive his patrons and limn the lineaments of all the lovely ladies of the land."

All the rooms, reception, dressing, skylight, should have thorough attention every morning early, before customers appear; every corner presentable; every chair in place; every glass polished; every picture hung straight; every countenance cheerful—then *advertise*, and change your ads. every issue.

*Too many pictures shown at once* is another curse of many a might-be-money-making studio. Fewer pictures frequently changed is the way to win attention, patronage, and money?"

Cords of cabinets to be shuffled by every customer, till the whole stack of specimens become shopworn and shabby, label the studio "cheap."

Do well-appointed stores tumble out their whole stock in a bunch? Not a bit. "Few at a time changed often" is the rule for displaying fine goods in up-to-date shops.

When articles of worth, like laces and pictures, are displayed in avalanches—yards and yards of fabrics swinging in the air; yards and yards of pictures plastered here and there—they look cheap, and a sense of surfeit seizes you as you turn away from the "job-lot."

Does the diamond dealer exhibit an acre of brilliants, or the lapidary show a sprawling handful of gems for selection? No, only a few at a time, perhaps but one choice stone on a velvet square. How precious—how exclusive it looks! Shows up "splendid" in the customer's eyes and draws a generous check!

Show your pictures few at a time; have them choice, and change them often. The more prints on the wall and the less on the table and showcases the better. Even the ignorant backwoodsman realizes that anything in the picture line hung on the wall demands more praise and commands more price.

Six or eight superb specimens of three dollar cabinets, finely framed, hung on the wall demand five dollars a dozen, when a bundle of four dollar panels tumbled on the table will go begging for the price of a tintype. Which is the more appetizing—rice pudding on dainty Haviland, or Waldorf-Astoria ice-cream served on a tin plate?

It's all right to make specimens from all good negatives and subjects; but when you carry in a handful to the reception-room, don't forget to bring back some of the older ones to start the fire with.

Studios in fashionable sections should have no showcases. Let the people who sell biscuit and bonnets have the glass enclosures. Put your proudest prints in frames on the wall; don't consign your choicest creations to a casket!

"Something new" is the constant cry on all sides. Fresh goods, fresh news, *fresh advertising;* for advertising *is* news —*business news*—in every *woman's eye.* Women are the readers of advertisements, and do nine-tenths of all the retail buying.

You must work and work hard to keep up to date. No business succeeds without constant vigilance and hard work back of it, in front of it, on each side of it, and all through it!

It's just as necessary to advertise as to unlock your front door in the morning; more so as time advances.

The progressive photographer is too busy with keeping up the standard of excellent work—improving on it, and catering to the wants of his clients, to write ads., or learn how. Neither has he time to coat his paper, prepare his plates, make his mounts, or refine his chemicals. He realizes that even with natural taste for ad. writing it takes time and training to become proficient. With foresightedness he decides that it costs but a little to have his ads. written right, and wisely leaves that part of his business to someone whose practical experience and sympathies warrant wise wording and convincing arguments.

*One Thing at a Time* will be the topic of the next talk.

## DIAPHRAGMS AND THEIR NOTATION.

It is an unpleasant fact, says the *British Journal of Photography*, that, although a great change for the better has been perceptible of late years, a knowledge of the most elementary laws relating to the foci and the apertures of lenses is by no means usual among photographers. The recent wonderful advance in the construction of lenses, however, has brought the subject so much to the front that constant discussion has helped the advance of knowledge, and indeed to understand and appreciate what the modern optician has done for us necessitates a somewhat complete understanding of this subject, and renders opportune the recent pronouncement of the Royal Photographic Society upon lens diaphragms. It seems marvellous, bearing in mind the hundreds of thousands of photographic lenses that have been made, that up to the present time there has not been a universal system of numbering diaphragms adopted by all countries. Yet no such system exists, or seems likely to exist. The first sets of dia-

phragms that were made had no pretence to system—there was full aperture, and a very small diaphragm, with a series between regularly graduating in size. The first step in a scientific direction was made, nearly forty years ago, by the late Mr. Dallmeyer, who made his diaphragms of such area that each successively smaller one needed double the exposure of its predecessor; some of his lenses, however, having diaphragms requiring an exposure half-way between, and being marked accordingly. If anyone required to compare one maker's lenses and diaphragms with another's he had to make measurements for himself as the notations adopted by the various makers were purely arbitrary, and not mutually comparable.

So things remained till, twenty years ago, Mr. Watmough Webster suggested a system for common adoption, that a, then, theoretical *f*/2 aperture should be the unit, and all other diaphragm numbers should be direct multiples in inverse proportion to their intensity. The proposition contained also a provision for approximating to an effective aperture. This plan received no support whatever, and was forgotten. But ten years later an identical proposition was made to the Royal Photographic Society, differing only in employing *f*/4 as a unit, and ignoring effective aperture. The plan became popular, and even now lenses are sent out in large numbers marked in accordance with this system, for which, shortly after its enunciation, we proposed the symbol U. S. (Uniform System), which has been generally adopted. But other systems have arisen, varying mainly in the unit adopted; and to this fact, and the theoretical disquisitions to prove the superiority of each maker's unit, may possibly be attributed the failure to acquire that reasonable acquaintance with foci and apertures, which we deplore. The subject was considered too abstruse.

Meanwhile the common sense of the photographic community has led to the virtual adoption of a system of notation which is scientific, logical, and, with one correction factor employed, strictly accurate; and, being founded on the properties of the lens itself, without reference to any base or unit whatever, renders all diaphragm notations marked under the system mutually comparable. We refer to the system of marking the diaphragm with the proportion that the lens focus bears to the aperture, the ratio being represented in the usual way as a fraction, with the focus, of course, as numerator, and the aperture as denominator. The majority of lenses now issued are marked in accordance with this principle, and in all probability all photographic lenses will eventually be marked under this notation, as it does not need any effort of memory to remember a unit, and anyone can find out for himself all the necessary data for the purpose.

We have just referred to a correction factor. Nothing of the sort was, as we have said, adopted in the Society's original system; but the precision nowadays expected from makers in describing their products renders it necessary that not merely the aperture but only that much of it that is effective be given. We may explain by a parallel. A house might be provided with a drawing-room window of a certain size, say two yards square, and outside that window with a conservatory built with a frontage five times as high and five times as broad as the window. It would be deceiving a possible tenant to advertise the house as possessing a drawing-room window ten yards by ten yards, for the only way the light could come in would be through the two-yard square window. And so with diaphragms, there is often a waste space of margin that is not utilized, and the true ratio can only be known after ascertaining how much waste margin there is, or else how much of the whole aperture is "effective."

The new system of the Society indicates this; it abandons the U. S. system, and adopts the ratio of focus to true aperture, and this it ascertains by finding the diameter of a bundle of parallel rays issuing from the front of the lens, a point of light being placed at the back focus of the lens for parallel rays.

Owing to the lack of knowledge we have spoken of, this very simple matter will not be universally understood by any means; but it may reassure readers to be told that all existing figures on lenses indicating the *f*/aperture ratio will be, relatively, quite correct; their only error may be that they read too high or too low. The error will be the appreciable breach, and for any one

lens may be ignored. It is only when comparing it with another lens that erroneous conceptions can be made. Finally, we may say that our best wishes go with the new standards, and we hope that eventually U. S. may stand for Universal System.

## NEW LENSES.

THE constant announcement of a new lens raises the notion that something original has been discovered, that a new principle is being applied, or an entirely novel instrument has been prepared for the benefit of photographers. These claims when made are quite groundless, they rest on entirely false issues, and are only supported by reason of the little attention that is paid by the many to the actual construction of lenses. It may seem somewhat of a paradox to assert that there are no new lenses, and from the nature of things there never can be. The principles which govern the construction of the lens are fixed and unalterable, they are the same to-day as they were when the first lens was constructed, and not until our present conceptions of the nature of optical phenomena radically alter will a new lens be possible.

*So-called "New Lenses."* In early days the photographic lens was constructed of crown and flint glasses, each having a different refractive index; by a combination of these two glasses the various aberrations were corrected, and, according to the arrangement, a lens was a doublet, triplet, or symmetrical. By leaving an air space or a layer of water between the lenses two more refractive indices entered into the arrangement, and allowed of as many more combinations and other series of "new lenses." When all these adjustments were exhausted, attention was given to the manufacture of new glasses. This resulted a few years since in the manufacture of glasses having a great variety of refractive indices. Now, as the construction of a photographic lens turns mainly on the refractive index of the glass, it is evident that when glass becomes available, having numerous refractive indices, a whole series of combinations will yield as many different lenses. If each of these can claim to be a "new lens," then not a dozen, or a thousand, but an infinity of new lenses is possible.

*New Optical Glass.* The mere fact of using a new optical glass does not constitute a new lens; it may, indeed, show no improvement upon already existing lenses. If, however, it puts in the hands of the photographer a lens that possesses superior qualities, or which enables him to do what was previously impossible, the most that can be claimed is that the lens is an improvement. Improvement in lenses is therefore the more correct expression to define what has actually been done in the modern lens, these inprovements being made possible by the introduction of optical glass more suited to meet the requirements of photographic lenses. We do not wish to depreciate the work that has been done, but rather to make clear to the user of lenses that no new principle has entered into the construction of lenses, and that they must still be judged on the old qualities and old standards of performance.

*The Perfect Lens.* The perfect lens would be the point of Euclid, a position, without magnitude; this is obviously impossible, the nearest we can approach to it being the pin-hole. The pin-hole for the formation of images has only two defects—bad definition and a want of illumination. These two defects are serious obstacles for the work of the photographer, and the pin-hole is really of no practical utility, although having a minimum of defects in the images so formed. The use of a simple double convex spectacle lens removes at once both these defects, the definition improves, and the illumination is sufficiently strong for practical photography. Keeping in mind what has been defined above as the perfect lens we see that the mere introduction of a spectacle lens in the path of the rays of light has created a position of considerable magnitude from which the rays emerge. However thin a lens may be, its thickness must be greater than a wave length of light; it, therefore, offers a resistance to the passage of light, and by so doing diverts it from its rectilinear course.

Secondly, a lens to form images must be thicker at the centre than toward the edges, and hence the resistance at the centre will be greater than toward the edges. While, therefore, a lens will overcome the defects of the pin-hole, the fact of introducing a magnitude in the path of the rays causes a resistance; the rays are bent from their course, and the various aberrations become manifest. Secondly, the spherical form of this magnitude causes other defects, curvature of the field, and astigmatism. The lens, therefore, introduces more defects than it cures, and the photographic lens is designed to give the maximum definition and illumination, combined with a freedom from the defects inherent in the use of lenses in the formation of images.

*Definition.* The first test of a lens is definition, sharpness of focus, and this definition the photographer desires over a plane surface. The spectacle lens forming an image is spherical, hence the surface upon which the image is focused should also be spherical. On a plane surface there can only be one point at which the image is absolutely sharp, and the definition falls off as any position removed from this is taken. To obtain definition over a plane surface it is necessary to construct the centre of the lens of different material from the borders, and this has always been done as now by combining a concave with a convex lens of different density, so that the resistance offered to the axial rays is greater than offered to the abaxial rays. Here we see the importance of the glass factor; given a wide choice of optical glass, of various refractive indices, the needed compensations could be very accurately worked out. This advantage has been fully utilized in the modern lens, curvature of the field has been largely eliminated, and definition has been obtained within an angle that was before impossible.

*Illumination.* The maximum illumination is the second requisite in the photographic lens, and definition and illumination are opposed qualities, that is, the one improves at the expense of the other. Definition and illumination are controlled by the diaphragm in relation to the focal length of the lens; reduce the aperture, and definition can be improved until absolute sharpness and flatness of field are obtained, this at the expense of illumination. Enlarge the aperture until the maximum illumination is secured and definition is proportionately worse. Evidently, then, the maximum illumination combined with strictest definition is not possible, and all lenses are a compromise between the two. The new glasses have effected an improvement by giving superior definition, hence allowing an enlargement of diaphragms. The *f* number at which rectilinear lenses used to work was *f*/8, and then it was risky at the edges of the plate. The full working aperture of recent lenses of the universal kind is *f*/6.8, the relative exposures of these lenses would be about 1 to 1½ with the same definition, the illumination is half as bright again, which is a considerable achievement to proceed from a re-arrangement of the glasses of a lens.—*Photographic Chronicle*

## PRICES AND QUALITY.

"SMALL profits and quick returns" may help to run a grocery or a dry-goods store, but it is scarcely the motto to tack over the entrance to a studio. A photographic business must depend too much on the personal equation of its head; and cannot be enlarged by the creation of departments or increasing of the number of clerks. There is ever a tendency to think of the evil of price-cutting whenever competition is unduly keen or prices unduly bad. But the stress of this unfair fighting inevitably results in a poorer grade of work. It is interesting in this century of grace to turn up a brief article written some eight years ago, when professional photography was in its deepest depths. Xanthus Smith, writing of the almost irresistible temptation of cutting prices to the lowest possible limit, pointed out the futility of such a course.

Let any enterprising, talented, incoming young photographer take the pains to instruct himself in the business methods of those photographers who have come out

best, both financially and in reputation after a twenty-five or thirty years' career in the business, and see whether the successful men have been the cheap men. We think he will find that those who are best off are the ones whose aim it has been to produce good work, work such as they might always feel did them credit, and who adhered strictly to fair prices—prices which remunerated them in a fair way for the labor and talent which they bestowed upon their work.

Any sensible individual, if he stops to reason, will see that it is a mean spirit of rivalry, which can only end in short-lived success, to plant yourself beside an honest, well-established photographer, either in city or country town, and, by cutting prices, rob him of a share of his well-earned business. If you continue, you ruin the profits for both. If you, after a time, remove, to repeat your game in a new location, what have you gained? Surely, nothing in reputation, and the expenses of bandying about will soon have eaten up your miserable, scanty profits. If it becomes necessary to locate yourself in the vicinity of others of your craft, honest, good price men, or cheap men let them be—keep your prices up, and let your competition with them be in the excellence of the work. Instead of doing cheaper work than they do, do better work. Let the competition be a *best man* competition, and not a "cheap John" competition, and, if you crowd out your rival, it will then be simply carrying out one of nature's infallible laws, namely, the survival of the fittest.

The photographer, somewhat like the artist painter, should not espouse his business with the sole view to making money. If his aim be the acquiring of a fortune, he should choose another field for his talents. A few instances there may be wherein a considerable amount of money has been acquired even in a comparatively short time by photographers, but these must be looked upon decidedly as the exceptions and not as the rule. Such instances have been the result of remarkable business tact and skill, and fortunate location, certainly not of cheap work.

## THE CRAVING FOR BUSINESS.

It is one thing to get orders, another thing to execute them satisfactorily, and a totally different matter to make a profit on them. These things must be separate and distinct departments of any well-organized business entrusted to men who have special gifts in each of these directions. It would be absurd to expect a traveller to superintend the execution of his orders and be responsible for bringing them out at a profit At any rate, it would very soon dull all his abilities for getting orders. Equally foolish would it be to expect a man who may have splendid gifts for organization indoors, to go out with any chance of success outdoors in search of orders. Again, how futile it would be to suppose that a cashier or an estimating clerk would make any success as a canvasser, or even as the manager of any of the executive departments of a warehouse or factory. With his mind full of niceties of figures, he would lose the chance of getting an order while he was weighing the chance of making a profit, and his soul would rebel against the idea of suffering a loss in order to make a gain in some other direction.

There are occasions in commercial life when those who run a business must stand by with equanimity and see a serious loss going on which cannot be checked, except to the injury and future detriment of the concern. This can only be tolerated in the case of a man of strong character and with the reputation of past achievements, not simply the dreamer who imagines he can go on losing money indefinitely to realize imaginative future profits. The man who knows his own strength can bear a loss with an easy spirit, bearing in mind the counsel: "Whatsoever thou taketh in hand, remember the end, and thou shalt never do amiss."

It is a true and invariable law of nature, which we find exemplified throughout the whole circle of sciences, as well as on every side of our social life, that there never can be a gain without some contingent loss. In chemistry we ask for

more potency of chemical action, and when we get it we find the gain is almost neutralized by some complicated reaction. In mechanics we ask for more speed, but to attain it we lose in power and in directness of action. In electricity we ask for more intensity, and what we gain in some directions we lose in efficiency in others. And so it is in business, the study of loss is equally as important as the gain; even so is it in our individual life that the attainment of wealth and influence is not without its disadvantages. Happiness does not alone lie in the possession of wealth, and many a man who has gathered in the fruit of his life labor has found it to be only as sour apples. The only true happiness is the absence of everything that tends to make a man unhappy, and money will not purchase that immunity. It will not ease the troubled conscience, nor allay bodily pain, nor bring sleep to the restless. "Can gold calm passion, or make reason thine? Can we dig peace or wisdom from the mine?"

The craving for business is in some men as the insatiable desire for wealth. They cannot bear to lose an order, however unprofitable, and thus the gain of the order is too often a minus quantity. The man who craves for orders at any price is not far removed from the miser craving for gold. Nothing can be said against pushful determination to get orders, but the man who carries it to the extreme must either rob himself or his firm of the due rewards of business, or must resort to deception and intrigue in order to make up his profits. It no doubt requires a firm will to let an order go by, but the man who can do it will be the gainer in the long run, not only in pocket, but probably also in self-respect.

It also requires a sound judgment to determine when to forego an order which is just on the border-land between profit and loss, and the experience which will enable one to determine this can only be obtained by a thorough grasp of detail and sound knowledge of the subject. In giving estimates nothing should be left to guesswork, but should be based on careful calculation. Then, if it comes to competitive bargaining, you know where you are and how far you can go. When labor and material are in question, it is only the firm which has its men thoroughly in hand, and knowing their capabilities and their economy of working, that can hope to compete. When it is a question of the sale of a commodity for which there is a market price, it is the firm whose financial resources and business system are the best that is likely to get the order. It amounts to this, then, the better organized a business is the better it is able to compete, and when it comes to estimating against a firm of equal standing, the chances of getting orders are fairly equal. When you are pitted against the reckless estimator, it is better to be without the work than to try and get it at a price which figures at a loss on your estimate.

Of course, if there is certain work which is speculative and doubtful, it is open to consideration whether to take on the job on chance of being able to make a better profit than anticipated. Circumstances will largely influence this; it may even pay to lose, as we have already pointed out, in order to secure a gain in some other way. But it is senseless and suicidal to accept orders at any price for no other reason than that you are told your competitor is lower.

What is the use of toiling and worrying merely to get orders? Businesses exist for making a profit, not for making a show. You don't work for fun or to please nice customers. Your business has got to bring in sufficient money to prevent you from feeling the want of that commodity—just sufficient to make you feel sure of your position and to place you above those small schemes and struggling in which the mass of the people have to pass their existence. Sufficient for the present and enough for the rainy day should be the sum of human happiness. When you have got that you can rest on your oars and glide idly down the stream of life, leaving others to go on struggling among the rocks and rapids.

How often do we see men doing apparently a big business, yet making nothing for themselves, slaving on year after year to make a bigger turnover, yet never gaining an additional farthing toward their own personal comfort, chained to their task, and doomed, like Sisyphus, to "everlasting hope," always rolling the stone uphill, yet never reaching the top!—*Penrose's Process Work.*

# HINTS AND GOSSIP.

BY F. HOPE.

It is fortunate that "fraternity" is dinned into us so assiduously, otherwise I should feel inclined to hate my nearest rival in this city. Of course, I flatter myself that I am the better photographer, but he has just made a hit, and my nose is out of joint in consequence. One of our Senators has been in the town for a couple of days, and I obtained a sitting from him and exposed six plates. The Senator is affable and long suffering, and I believe the other man used four boxes of plates on him. It was chance-work—oh, yes; but out of the fifty exposures he has fluked or hit on two good pictures, better than any one of my six. I have withdrawn my pictures from my window, and he scores as an "artist photographer." We are often and truthfully told that it is the everyday work which makes a solid reputation. Nevertheless, the wise business man will never miss an opportunity of keeping his name favorably before the public. Many people will see these portraits of the Senator, and as they discuss matters photographic they won't forget to mention the fact that old man Stanard charges 50 cents a dozen more than his competitor. And why should they pay that extra half-dollar when next they go to the photographer?

Some couple of years ago I got ahead of this same neighbor through—shall I say—a little lack of tact on his part. I believe neither in price-cutting nor in being brow-beaten, but there are times when one may live *too* literally up to the letter of the law of independence. It was the common case of a lady who simply wasn't pleased with some photographs. Why the pictures were displeasing, Heaven only knows (unless possibly the lady herself knows, which is improbable). But the photographer was altogether too logical. He pointed out that the pictures were good likenesses and good photography; "and therefore, madam, if I repeat the sitting, and for no fault of mine, it is but reasonable that I make a second charge." In the end the lady came to my studio with a wild tale of iniquity about the other man, and, as the fates would have it, my work, which was probably no better than the rejected work, pleased. Now this lady had been a steady customer, and without any wish to be unjust—she simply did *not* like her pictures. I think that in such a case the wisest plan would have been to endeavor to satisfy the customer, rather than to niggle too particularly for the pound of flesh. Indeed, if we charge a fair price for our work, it is well (without losing sight of the business end) to sometimes let the artist show rather than the tradesman.

Do you keep a daily paper in your reception-room? I for years placed my paper on a table in the room, and one fine day the opposition candidate for Governor called at the studio. He picked up the paper and laughed. Since then I have taken both Republican and Democratic papers.

It has been said that photographers are the most unprogressive of mortals, but I think that any man who knows them will rather marvel at the way in which they advance with or ahead of the times. I have followed the modern ideas, although I am getting an old stager, and have very much curtailed my retouching. I like to soften some shadows, though I avoid many of them by care under the skylight, and I like to slightly flatter my lady sitters. I do not follow the new photography. I can make some fair *imitations* of good new work, and could doubtless flatter myself that I could turn out either style as required; but I have followed the old photography too long, and will stay by it while it stays by me. It is rather a wonder to me, when platinotype paper is so badly worked by so many printers, that ladies are content to have their photographs upon it. I think that either printers will have to be more painstaking in their work, or else there will be a revulsion in favor of glossy or *very fine* mat paper. Semi-rough papers came in not because of art, but because of fashion. Aristocracy wanted something different from the democracy, and the latter went for gloss. But if

work other than the best is turned out there will be another veer of fashion. The "advanced amateur" (some of him) does very interesting work, but it is not professional portraiture, and in spite of the many eulogistic things said about it, it will never be a menace, though if its votaries are observant, some of them may merge their work into professional. In conclusion, I cannot help thinking of the old London cabman who drove a cab for sixty years. He said that 'buses and railroads and electric cars had all been prophesied as sure death to cabs, but in spite of them all, and of the coming automobile, the cab still flourishes. So it is with photography; in spite of "processes" and general cheapening; in spite of the amateur and the incompetent, professional work not only holds its own, but continues to grow ever broader and more remunerative and more honorable.

## REDUCING HARSH CONTRASTS.

THERE are many ways of "faking" contrasty negatives. Some workers have an absolute genius for varnishing, or masking, or in some way working over the glass back of the negative, with intent to keep the light away from the dark shadows, and so give dense high lights a chance of printing through. But to many the work is unsatisfactory, and where sharp lines divide the lights and shadows—as is so very often the case in interior work—they find that the thickness of the glass interposing between the film and the masking prevents fine clear-cut lines of difference. If only it were a film negative, with its negligible thickness; or if the working could only be done on the film itself, instead of on the glass support, the work might be so much more delicate.

It is this latter plan that I am going to suggest. Given a steady hand—no steadier than is required on the back of a negative—and the work is not difficult. In brief, the plan is to first *stain* the negative and then locally clear it over the dense parts. Let the negative be quite free from finger-marks or other grease spots, and lay it in a solution of sal-soda, to which some pyro has been added. Do not make the solution strong enough to frill the negative. The solution will very quickly oxidize, and the negative may be laid in it for twenty or thirty minutes, or until it is stained a deep yellow. Rinse it, and when dry lay it in a retouching desk, so tilted as to bring the film flat. The stain is now removed from the dense parts of the negative by a strong solution of citric acid applied with a very fine sable-brush. Have a few small scraps of blotting-paper on hand, to take up the acid from any part sufficiently reduced, or from any part where it should not be. Do not let the brush be too heavily charged with the liquid, or it may over-run in some places. Better to go over the ground two or three times, if necessary. When sufficiently reduced, wash well. A yellow stain thus placed in thin shadows will prove a wonderful help to the printing value of a negative.—G. W. B.

## WARM-TONE LANTERN SLIDES.

BY GEORGE E. BROWN.

I DISLIKE chemical gymnastics—especially when the performance takes place on the gelatine film of the lantern plate. Therefore, in the methods which I am going to recommend to the slide-maker who wishes to suit the color of his slide to the subject, I shall not mention any which call for a whole string of operations; and the reader will not lose anything on that account, for the colors obtainable with the processes described below range from warm black to the red that is called Bartolozzi. I will assume that the reader knows enough about slide-making to be able to produce transparencies a little thin and flat, or a little hard and dense, at will. He should

pay particular care to thorough fixing and ample washing; but he is not likely to go wrong on these points, for the film of the lantern plate is so thin that the fixation and washing are very soon complete.

With the ordinary mercury solution as used for the intensification of negatives, followed by some other darkening bath, a large number of pleasing tones are readily obtainable. For these the slide should be fully exposed and a little thin. Bleach in the mercury solution until the back and front of the slide are white, wash for half an hour or so, and place in one or other of the following:

Washing soda (10 per cent. solution) gives a reddish-brown tone.

Soda sulphite (10 per cent. solution) gives a warm black tone.

Hypo (20 per cent. solution—*i. e.*, ordinary clean fixing-bath) gives a brown tone.

Lime-water gives a purplish-brown color. Lime-water is made by shaking up some quick-lime with a fairly large quantity of water—say about a quart to a teaspoonful of lime—letting the milky mixture stand, and using the clear liquid.

After either of the above, the slide is washed for a few minutes.

Gold toning after bleaching with mercury gives some very charming colors. The slide should be of the usual density. After bleaching as above, tone in a sulphocyanide bath made as follows:

| | |
|---|---|
| Chloride of Gold . . . . | 1 gr. |
| Sulphocyanide of Ammonia . . | 10 grs. |
| Water . . . . . | 2 ozs. |

In this bath the slide will gradually tone, passing from a warm brown to blue. I will make a slight digression to point out an effective use of this method. It is in the case of pictures of snow and ice, in which one wants to get the blueness of the ice contrasted against the other parts of the picture. Tone in this bath, and arrest the process when the high lights—the ice and snow—are just reaching the blue. The heavier shadows will still be dark brown or purplish-brown. For Swiss scenery and the like, this double toning is a distinctly valuable addition to one's methods.

Mercury chloride alone, without any after-solution, gives a very good brown tone, which, so far as my experience goes, is quite permanent in the lantern and out of it. The slide may be slightly thin and soft.

Now I come to a toning process of which I am very fond indeed. It is the acme of simplicity, and though many variants of it have been recommended by the gymnastically inclined, I do not fancy they are any improvement on the original formulæ of Mr. Wellborne Piper. These are:

*Stock Solution.*

| | |
|---|---|
| Potass. Bichromate . . | 10 grs. per oz. |

The various tones are obtained by adding a chlorine, bromine, or iodine compound to this bichromate solution, thus converting the silver image into chloride, bromide, or iodide, as the case may be.

To make the bath for chloride tones, add 80 minims of hydrochloric acid to 10 ounces of stock solution. Place the slide in this until the whole film changes to a cream or pale yellow color. This it does in a few seconds. Rinse under the tap for a few moments, and transfer to a weak solution of potass. metabisulphite; strength does not matter much—a few crystals in half a pint of water answer the purpose. The bleached slide remains here for a little while—*i. e.*, until the yellow bichromate stain is removed. As soon as the high lights appear quite white when the slide is laid on a piece of white paper, the process is continued by washing the plate for a quarter of an hour or so and drying. Now comes the last part of the process. The tone obtained at this stage alters a little when the slide is exposed to daylight; therefore the dry transparency is stood in a window for a day or two and exposed, back and front, until the point is reached beyond which no further action takes place. They can, if desired, be masked and bound before being thus exposed.

To make the bath for bromide tones, 5 grains of potass. bromide and 8 drops of strong nitric acid are added to 1 ounce of stock bichromate solution. The iodide bath is similarly made by using potass. iodide (which is a very expensive salt, by the way, and should only be purchased as required, for it does not keep well) in place of the bromide.

Now, the excellent feature about these three baths is that they soften down or mellow the transparency in a very pleasing way, which it is difficult to exactly describe. Greater transparency is given to the shadows, as may be very markedly seen by toning only half of a slide. For slides from under-exposed snapshots, which usually suffer from hard, black shadows, it is exceedingly useful, and there is no objection whatever to it on the score of permanency. The tones vary somewhat with the brand of plate, but the general tendency is as follows:

| | |
|---|---|
| Chloride | Warm Brown |
| Bromide | Cool Gray |
| Iodide | Brown |

The iodide tone does not alter on exposure to light, so that in this case "sunning" is unnecessary. The bromide tone is a particularly fresh gray, something like a salt platinum print—a tone which it is difficult to get by direct development. As mentioned above, the process softens contrasts slightly, and if the slide is made specially for toning in this way, it should have a little extra pluck.

Somewhat similar to the foregoing is a process which I have used a good deal. It gives a fine transparent brown tone, but does not soften down the slide as does the haloid method. The formula is that of Milton B. Punnett. Prepare—

| | |
|---|---|
| Potass. Bichromate | 25 grs. |
| Common Salt | 50 " |
| Alum | 80 " |
| Nitric Acid (pure, strong) | 25 mms. |
| Sulphuric acid (sp. gr., 1.8) | 50 " |
| Water | 10 ozs. |

Dissolve in the order given, and immerse the fixed and well-washed slide. It rapidly bleaches. Rinse it a few seconds in clean water, and pour over a solution of sulphuretted hydrogen gas in water. I am free to admit the rank offence of this after-liquid; but the results are worth the trouble of keeping the liquid well stoppered, and using it where the hydrogen sulphide which escapes can find its way at once into the open air. Solution of sulphuretted hydrogen can be obtained of large chemists. It does not keep unaltered for very long, but the milkiness which gradually makes its appearance does no more harm than to make its action a little slower. A few minutes washing afterward completes the process, and, in my experience, the results are permanent, as, indeed, they should be, for the image consists of silver sulphide.

I now pass to toning with uranium and with copper. These methods have the good points that they take place in one solution, and that the color gradually passes from black to red, so that one can get quite a number of different colors with the same bath.

To make the uranium toning bath, dissolve uranium nitrate and potassium ferricyanide separately in water—5 grains per ounce. Mix equal parts of these two solutions, and to each ounce add 20 minims of acetic acid. The well-washed slide is placed in this solution. The color rapidly changes, being first warm black, then chocolate, then brown, reddish-brown, and finally red. At any stage the process is arrested by removing the slide and setting in a large dish of water. It is best not to rinse under the tap, because hard water affects the toned images and causes patches. Immersion in a large dish through which a slow stream of water is flowing is best. As soon as the high lights are free from yellow stain set aside to dry. Sometimes it is difficult to get the yellow stain to go. A very weak bath of carbonate of soda (washing soda) will remove it, but remember that it will remove the tone as well; therefore, plunge in the alkaline bath for a moment only, and at once remove to a dish of clean water.

Uranium offers a ready means of relieving the monotony of a series of slides made from line drawings. The earlier stages of the process should be utilized, for the warm blacks, brown-blacks, and chocolate-browns are very suitable to many subjects, and are a welcome change among slides illustrating a story or history.

The most vivid red obtainable with uranium is got by toning the slide as far as possible, rinsing, and placing in Farmer's reducer. The silver image is thus dissolved away, and the pure uranium image left.

A very fine green tone is given by toning in the ordinary uranium bath to an orange, and placing direct in—

| | |
|---|---|
| Ferric Chloride | 3 grs. |
| Water | 1 oz. |

Uranium intensifies very considerably as well as tones, so that thin slides with all detail, but no great density, are the best.

Ferguson's copper toning process, which is now quite well established in application to bromide papers, is very suited to lantern slides. Make three 10 per cent. solutions of (1) copper sulphate, (2) potass. ferricyanide, and (3) potass. citrate. To make the toning bath, take—

| | |
|---|---|
| Copper Sulphate Sol. | 35 vols. |
| Potass. Ferricyanide Sol. | 30 " |
| Potass. Nitrate Sol. | 250 " |
| Water | 300 " |

This mixed solution, which is about half the strength originally recommended by Mr. Ferguson, is used as soon as mixed; it keeps only a few minutes. Those who want to experiment can obtain the salts ready prepared in "tabloid" form. The stages through which the slide passes somewhat resembles those of uranium toning, but the image is more transparent, and there is no need to start with a thinner slide than usual. Moreover, there is no staining of the high lights, or should be none, if the chemicals have been mixed in the correct proportion. Any staining indicates deficiency of citrate. Warm black, brown, reddish-brown, and brilliant red are some colors at which the action can be arrested.

Still another toning process is worth a place among these notes, because the reader may already be using it for bromide prints without having thought of applying it to slides, and that is the alum-hypo method introduced by Kodak, Ltd., some years ago. Take

| | |
|---|---|
| Hypo | 4 ozs. |
| Alum | 1 oz |

and dissolve in

| | |
|---|---|
| Boiling Water | 32 ozs. |

Use this mixture cold in a trough in which the slides can be placed vertically. Toning is slow, some hours being needed to get the brown tone given by the alum-hypo mixture; but the slides require no attention beyond an occasional agitation of the bath.

In conclusion, do not rest content with the appearance of the slide as you hold it up to a light in a window. You will be deceived. Its appearance on the screen is frequently very different, especially in the case of processes like uranium or mercury, where the deposit is rather opaque.—*The Photographic News.*

## NOTES: INTERESTING AND CURIOUS.

*Burning by Becquerel Rays.* It has been recently announced in the *Comptes Rendus* that the invisible rays emitted by radium have an active effect upon the human skin. It is well known that X-rays, if sufficiently intense and in sufficiently long duration of exposure, exercise a destructive action upon the skin, which peels off and leaves an open sore that is slow to heal. Recently, Walkoff and Giesel observed a similar action exerted by radium. Mr. H. Becquerel now describes the effects noted by him on his own person. He carried a few decigrammes of radiferous radium-chloride, inside a small sealed tube, in his waistcoat pocket for a total length of time amounting to about six hours. In ten days a red mark, corresponding in position to the location of the tube, developed on his skin. It was followed by peeling and suppuration, and the sore did not heal for a month. This will add one more to the cheerful list of possible skin diseases that civilization enables us to classify, develop, and diagnose. In addition to the ordinary sun-burning which is prevalent in the northern hemisphere about this time of year, and is sought by giddy girls or callow boys, we have arc-light burns, X-ray burns, and Becquerel-ray burns. It seems likely that the action in each of these cases is similar, but a careful comparative investigation into the differences of action would probably be both useful and interesting. While the sun burns at a distance of ninety-odd millions of miles, the arc light and Crooke's tube act at a few centimetres, and radium at a few millimetres.—*Electrical World.*

*Photographing the Duration of a Wink.* A German scientist has given another

proof of the painstaking nature of his race in obtaining perfect accuracy and the most minute detail of all things. This savant has measured the time that is occupied by a wink. He used a special photographic apparatus and fixed a piece of white paper on the edge of the eyelid for a mark. He found that the lid descends quickly and rests a little at the bottom movement. Then it rises more slowly than it fell.

The mean duration of the downward movement was from .075 to .091 of a second. The time from the instant the eye rested till it closed varied from 0.15 to 0.17 of a second. In rising the lid took 0.17 of a second. The wink was completed in 0.4 of a second.

*Mezzotints.* Messrs. Lafayette, Limited, the eminent British photographers, who have just perfected an exceedingly beautiful printing process, by which photographs may be given all the characteristics of mezzotint prints of the period of Lawrence, Sir Joshua Reynolds, and their brilliant contemporaries, are to be warmly congratulated on their striking achievement. The clients of the firm are now in the privileged position of having their orders wholly, or partly, executed by this charming new method. Some specimens of portraits taken by the new process which have been shown reach a very high level of art, and are scarcely to be distinguished from the finest products of the most famous of the old engravers.

*Lantern Slides Showing Stereoscopic Relief.* The desirability of making lantern-slide projections—landscapes, buildings, portraits, etc., so as to give the effect of natural relief, is universally admitted, but thus far no single method of accomplishing the object has been suggested. The superposition of two pictures of the same subject on the slide, one outlined in red and the other in blue, which when projected on the screen are slightly "out of register," and which are examined through specially prepared spectacles of red and blue glass, affords perhaps the simplest way of accomplishing the result, but the method is nevertheless complicated.

Another ingenious optical artifice for giving the stereoscopic effect with lantern projectors is the following: a slotted disk is rapidly rotated before two lanterns, by which the views are projected on the screen in rapid alternation. The observer looks at the pictures through other slots cut on the rim of the disk in such manner that the right eye sees only the picture from the lantern on the right and the left eye that projected by the left lantern. By this device, it is said, if the rotation of the disk be made sufficiently rapid, the stereoscopic effect is produced without any perceptible flickering.—*Franklin Institute Journal.*

*A Method of Blocking Out.* Where only a few copies are required from a negative, and it is desired to block out the sky, background or any other portion, an easy and effective method of doing so is to light a piece of camphor and allow the smoke from it to deposit all over the glass side of the negative. A fine, black, opaque coating of carbon is obtained in this manner, the part which is required to print being then carefully wiped out, leaving the soot on the other portion to prevent the passage of light. Care must be taken to abstain from touching the black with the fingers, otherwise the coating will be removed from the part which is touched, and it will be necessary to repeat the smoking process. A slightly damp camel's-hair brush may be used for fine work, such as is necessary around trees at the sky-line. The brush when in use should be frequently wiped.

*Defective Negatives Through Slow Drying.* The drying of negatives in damp weather is attended with many difficulties and is sometimes very prolonged. This leads to defects—apart from their liability to dustiness—which do not occur if the plates are dried within a reasonable time. The last patch to dry on a negative will in some cases be found to be denser than the portions in which drying took place more rapidly. Negatives developed with hydroquinone seem to be particularly susceptible to this defect.

The probable cause of this is the occurrence of some kind of decomposition of the gelatine, which will not take place if the negatives are dried off rapidly by the use of a bath of methylated spirit. Another

remedy is to use the specially prepared flufless blotting-paper which is obtainable from photographic dealers. By blotting off the surface water the negative will dry evenly and will not suffer from the above mentioned defect.

*Pictorial Landscape Photography.* The useful series of articles on this topic by John A. Hodges, which has been published in *The Photo Beacon* of Chicago, is now obtainable in book form; price, 75 cents in paper covers; cloth, $1.00. (Tennant & Ward, New York.) In practical information and instructive illustrations this little book is almost ideal. We heartily commend it to those who need helpful teaching on its subject.

*Re-discovered.* A writer in the *News* says: "I note that a very old friend, ferric sulphate, is trumpeted forth as a *new* reducer. The discoverer, too, claims to have searched through all text-books and available literature to find any mention of it. Well, let us give him credit for good intentions, if not good execution. Ferric sulphate, or persulphate of iron as it is more commonly called, was used in the old collodion days. Leaper, in his *Materia Photographica* (1894), mentions it; French and German writers know it; and MM. Lumière, in their famous monograph on reducers (1900), describe its action and state—what everyone who, like myself, tried it years ago know—that it is not practicable for gelatine negatives because of the enormous tendency to the reduction of basic iron salts in the gelatine and the alteration of the color of the silver image, which makes it extremely difficult to gauge what effect the reduction will have on the printing qualities of the negative. MM. Lumière's monograph will give the would-be discoverer of new reducers plenty of choice of old and little known ones which can be furbished up."

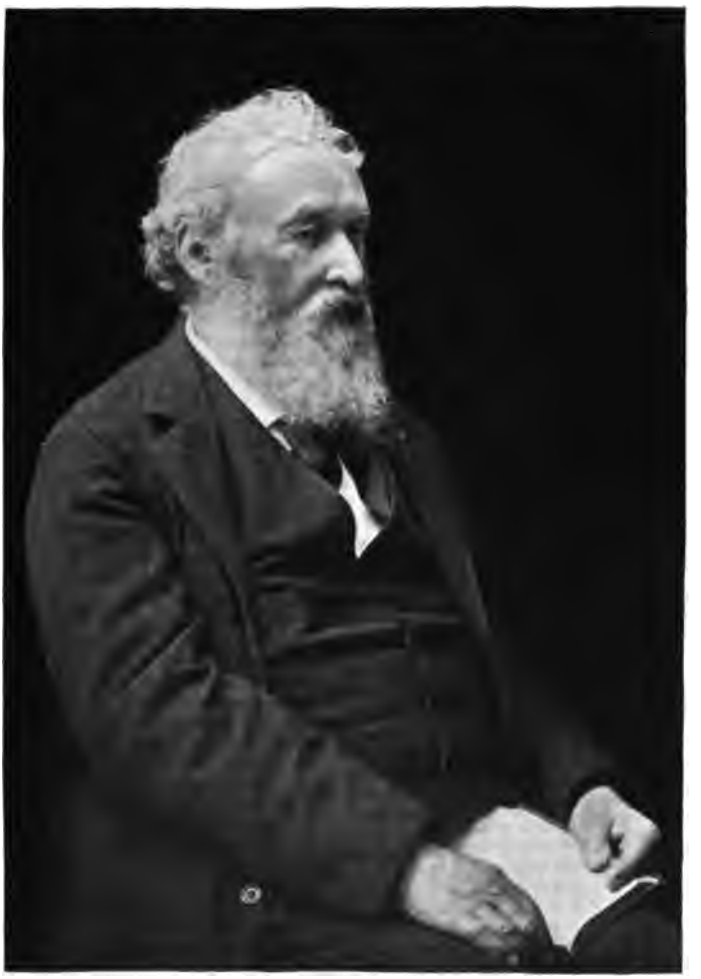
*The American School of Photography*, by correspondence, Scranton, Pa., is, we learn, meeting with unusual success. The object of the new institution, of which an old subscriber, Mr. J. B. Schreiver, is the practical director, is to develop and put into operation an efficient system for imparting by mail a thorough knowledge of art and photography, also the teaching of the commercial arts as applied to the production of pictures with crayon, pastel, water-colors, pen and ink, or in miniature form. The American School of Art and Photography is the pioneer in the teaching of these arts by mail. The staff of instructors, directed by Mr. Schriever, are artists of ripe experience in their special lines. The school differs from all others in being the only institution in the world engaged in supplying the public with the products of the art it teaches. The departments of professional photography, amateur photography, commercial arts, illustrating, etc., are all in charge of competent instructors. In constant communication with them the student is at once placed in touch with points of the greatest artistic and commercial value, saving the ambitious profitless excursions into the realm of theoretical research by immediate direction of earnest effort toward the destination of practical results by the shortest route. Apprenticeship in a studio offers meagre opportunities to an ambitious person, even after years of faithful work, as the busy photographer has little time or inclination to teach his secret processes and formulæ to new hands, preferring as a rule to depend for help on the limited supply of skilled artisans. The remedy for these adverse conditions is furnished through the Schriever system of mail instruction, employed by the American School of Art and Photography of Scranton, by which a student residing in San Francisco may secure—at home—the same effective command of photography or the commercial arts as is enjoyed by the resident of Scranton.

THERE is a right and a wrong way to charge a spotting brush. The brush should first be dipped in water and then partly dried by squeezing it against the sides of the water-jar. Pick up the color from the palette by gently twirling the brush. Pushing the tip of the brush back and forth on the palette stubs up the fine sable hairs and soon renders the brush worthless. Only the very tip of the brush must hold the color; and the body of the brush must never on any account be allowed to become clogged.

STUDY

By D. Rosser, Pittsburg

PORTRAIT
By Louis Walker, Philadelphia



PORTRAIT
By Pach Bros., New York

PORTRAIT
By Pach Bros., New York

PORTRAIT
By D. Rosser, Pittsburg

PORTRAIT

By D. Rosser, Pittsburg

1. Colonial Entrance and Hallway to Studio Room
2. View of Printing Room
3. Display Wall in Reception Room
4. Another View of Printing Room

THE VAN LOO STUDIO, TOLEDO

UNDER THE SKYLIGHT
Van Loo Studio, Toledo

# THE VAN LOO STUDIO AT TOLEDO.

In Northwestern Ohio the name most closely linked with good professional photography is W. F. Van Loo, of Toledo. During our visits to Ohio and Southern Michigan, as well as from little collections of work sent by Mr. Van Loo from time to time in the past twenty years, we have had abundant opportunity to know the work of the Van Loo studio—and we cannot recall an example which was not far above the average. This, in itself, is one of the strongest testimonials which could be given to the work of any photographer, but it is well deserved. The strong point in Mr. Van Loo's work is its reasonableness, its sanity. He has never given way to fads or peculiar styles, but has persistently pursued the single intention of making good, straightforward portraiture, to secure steady but sure improvement in his work. In this he has enjoyed the support of his patrons and the general public. Mr. Van Loo has demonstrated that the photographer who will interest himself in his work, and strive to please the public, to whom he appeals by his work and advertising, will meet the success he deserves. His advertising is as clever and as tasteful as his work. In it he avoids the loud display and all attempts to force things by freakish effects, so that his announcements produce the right effect, and tell of a studio where artistic portraiture is the beginning and end of things.

For some years Mr. Van Loo was associated in business with Mr. F. J. Trost, but in 1900 the firm was dissolved and Mr. Van Loo built a new studio at 329 Superior Street, taking the fourth floor of the Paddock-Hodge Building. This floor he had arranged and equipped to meet all the requirements of modern photography, and the new studio is one of the most complete and most pleasing establishments in the State. The location is altogether desirable for the best trade, and the building fortunately possesses a fine entrance, with roomy vestibule for display purposes. The floor occupied by the Van Loo establishment extends back 116 feet, with a frontage of 25 feet, and is lighted by windows on two sides, thus insuring ample illumination in all the rooms.

The engravings presented on other pages will give our readers a glimpse into the public- and working-rooms of the studio. The reception-room, into which the visitor first enters, is tastefully furnished in quiet colors. Near the door is an Oriental corner which gives a desirable touch of bright color; along one side of the room are three windows, while the opposite wall provides a thirty-foot display wall, as shown in our engraving. Near the elevator, but not obtrusively evident, is the office, with a spacious delivery cabinet for finished work behind the elevator, out of sight, yet right at hand.

From the reception-room a colonial doorway and vestibule lead one into the operating-room. This feature is shown in one of the engravings, in which also we catch a glimpse of the office. The operating-room is 25 x 36 feet, and is entered from the passage or vestibule at the left side. Its arrangement is completely shown in our engraving. The doorway behind the skylight leads into the printing-room, dark-room, and other work-rooms, so that the work of the establishment may be kept under personal observation at all times. Access to the work-rooms may also be had from the vestibule leading to the operating-room. The two engravings of the printing-room show how well the working-rooms of the studio are equipped for their special use. The retiring and dressing-rooms are arranged and furnished to harmonize with the general appearance of the establishment.

Mr. Van Loo, despite a "twenty-fifth wedding anniversary," recently chronicled, is still young in years and enthusiasm. We are glad to congratulate him on his new studio, and to wish him many happy years of work and pleasure in it.

---

To remove ink stains from a negative, an English journal recommends that the negative should be immersed in a 5 per cent. solution of oxalic acid. This is a risky experiment and should be tested on a useless negative until success is assured.

## A PICTURE OF PATHETIC INTEREST.

THE sadly interesting photograph which serves as frontispiece to this number of the MAGAZINE will, we are sure, be valued by our readers everywhere. It is given by the courtesy of Mr. George Edmondson, of Cleveland, Ohio, as a little but affectionate tribute to the memory of our late beloved President, William McKinley.

The story of the picture is well told in a news clipping sent us by Mr. Edmondson.

"It was a happy, light-hearted party that gathered at the home of Senator Hanna one night, during the first Presidential campaign of William McKinley, five years ago. Senator Hanna is a prince of hospitality in his own home, for there he leaves behind all business and political cares. There is nothing but the best of good will and good cheer in that home.

"It was an unusually happy gathering that night, for Senator Hanna had as his guests Mr. and Mrs. McKinley. The Senator, as cheery as a child, presided at the dinner and occupied the head of the table. Next to him sat Mrs. McKinley, then Mr. McKinley. To the right of the President was Miss Mabel Merriam, daughter of the present Director of the Census. Then came Miss Mary Barber, of Canton, a favorite niece of Mrs. McKinley. At the farther end of the table sat Mrs. Hanna beaming kindly over the guests and acting the part of the hostess. To the right of Mrs. Hanna sat ex-Governor Merriam, the present Director of the Census, and next to him was Miss Phelps, a warm personal friend of the Hanna family. Then came General Alger, afterward Secretary of War, and Mrs. Merriam. This completed the happy little party.

"Mrs. McKinley was in exceptionally good health and spirits that evening, and after the banquet Senator Hanna suggested a flashlight photograph. George Edmondson, the photographer, was telephoned for and arrived within a short time. The jollity of the evening was stopped long enough to allow the flashlight to be taken. When the pictures were developed every member of that memorable party marvelled at the excellence of the photograph, taking the circumstances in which it was taken into consideration. President McKinley remarked that it was the best portrait of Mrs. McKinley, and he prized it for that reason.

"Each member of the party took a supply of the photographs, and they were distributed among their nearest and dearest friends. At the White House and in Senator Hanna's parlor there are copies of the picture handsomely framed. At the Pan-American Exposition in the Ohio building, a copy of the now famous photograph had an honored place."

Incidentally, this precious relic of the past illustrates the importance and value of photography, by which art alone these memorials of the hours that pass can be secured and kept for all time. We are glad to be able to offer Mr. Edmondson's picture in these pages.

## AGFA-INTENSIFIER.

BY PROFESSOR RODOLFO NAMIAS.

THIS new intensifying preparation consists of a mercury salt and an alkaline sulphocyanide, and is prepared by the Actien-Gesellschaft für Anilin-Fabrikation, Berlin. It is a colorless liquid, which does not form any precipitate. For use dilute one part Agfa-intensifier with nine parts of ordinary water.

The negative which is to be intensified must be thoroughly washed and put into the dilute solution. Intensification starts immediately, and in about ten minutes the highest degree of intensification is reached. By transmitted light no considerable addition to the density of the negative is noticeable, but the precipitate produced by the intensifier on the image in place of the silver is of a very non-actinic nature.

Every negative which is intensified in this way will, therefore, give much better prints than before.

Although it may seem to the eye as if the degree of intensification gained by intensifying with sublimate and following blackening process by means of ammonia is higher, there is practically scarcely any difference between a negative intensified in this bath and one treated with Agfa-intensifier.

The Agfa-intensifier has the advantage over all similar solutions that it does not require a secondary blackening. By treatment with the intensifying solution and half an hour's washing a durable image is obtained that will perhaps get slightly darker in color on coming in contact with light, but besides this it does not change its appearance, not even when exposed to the light for a very long time.

Another advantage of the Agfa-intensifier is that it has no influence upon the transparency of the image, a fact that cannot be claimed for the action of sublimate and ammonia. When employing the latter process, and when, after using the sublimate bath, the image is not thoroughly washed, a white precipitate of mercuric-ammonio-chloride will be noticed, which has a bad influence upon the transparency of the negative.

If a slight degree of intensification only is wanted, the negative should remain a correspondingly shorter time in the intensifying solution.

I have also treated collodion negatives with Agfa-intensifier. The negatives, after having been developed, fixed, and thoroughly washed, were put in the same strength solution of the Agfa-intensifier mentioned before for the treatment of the silver bromide gelatine plates.

The result is obtained with great celerity, and in five minutes' time a very considerable intensification is arrived at.

On drying, the image assumes a perfectly white color. This appearance is strange, and one is inclined to believe that the precipitate on the collodion negatives is of another form than that on the bromide of silver gelatine negatives. By blackening with ammonia before drying, the negative will improve as regards density.

Intensification done in this manner is greater than when obtained by means of any other method, except intensification done with sublimate and following bath of ammonia sulphide, but the latter process has many other disadvantages.

The Agfa-intensifier can, therefore, be employed with great advantage in the photo-mechanical reproduction works for the intensification of line work.

## ABOUT MOUNTING.

BY PAUL CLARE.

It is rather interesting to note how much attention professional photographers are giving to the mounting of their pictures. We have long seen the effusions of some amateurs, but the fraternity is equally experimenting in this direction. I am not here referring to the many new designs with which the A. M. Collins Co. and others tempt us, though the art and intelligence put into their design and manufacture is sufficiently wonderful. I am thinking more of the way in which photographers endeavor to use some special type of mount peculiar to themselves. There are half a dozen or more photographers on Fifth Avenue, New York, who appear to cut or to make their own mounts or to use something sufficiently distinctive to be recognizable without seeing the name printed upon it. The fact appears to be that a judiciously selected mount, and one differing from those used by neighbors, is one simple and often very effective way of stamping work with an individuality which attracts the attention and comment of customers.

It does not behoove a photographer to be too extreme in his ideas. But it is a mistake to gauge the public mind or the public appreciation by what photographers themselves appreciate or think. We may be rent with some violent discussion as to the respective merits or demerits of old and new, or glossy prints and fuzzytypes,

but such things are unknown to the world at large.

The question of "taste"—horrible word—forever crops up. As a matter of fact, we are bound by convention, and if a man has any taste at all he may almost be a law unto himself. The latest fashion may be good taste and good art; but five years hence we will pass it by with a shrug of the shoulders as old fashioned. There are two rules—one of which is violated very much at present—which should, we are told, be borne in mind by all good men. They are that we must never vignette, and we must not trim to a circle or an oval. Now vignetting, before it was done to death, brought much good money to photographers, and just at present prints trimmed with one line and without corners are much in favor. The curious part of it is that these two much condemned fashions are in direct accord with nature. As we look at things, and see them very distinctly just where our eye more particularly rests, and less and less clear as we get further from this centre, so surely see we in vignette. And each eye sees a circular picture, and the combination of the two eyes sees an oval. However, we are not at present concerned with abstract theories. The question of mounts is referred to here—not for the first time—because the difference between successful and unsuccessful photography does not depend on one great thing, but on many little things. It is watchfulness and care at all points that make for success. A pleasing pose obtained, it must be supplemented by good lighting and good negative making. And the print must be correctly printed and properly toned. And then it needs to be carefully trimmed and evenly mounted, and wrapped in neat style for delivery.

The cabinet and carte mounts of happy experience are simply intended as a stiffener or support to the picture until such time as it can be inserted in an album. There has long been a feeling that the shape of this mount was too "squarey," and as soon as photographers broke away from it they showed an inclination to trim half an inch from each side of a cabinet print when the print represented a standing figure. The small portraits of women, for which Spellman is so well known, will occur to everyone. The dealers took the hint, and when they pushed the oval mount they introduced one very narrow and very tall, which nobody liked at first glance, but which everyone soon became used to. These mounts, with their embossed borders, enclosing an arbitrary space, are good helps to the photographer who knows how to assort them into his dozen prints—trimming his prints to fit several mounts, and so giving the customer a pleasing variety of choice. The use of a plain mount, allowing any size of trimming, is too good a fashion to be allowed to let drop, and I rather hope it will become commoner. The introducers of the "Rembrandt" graduated mount deserve thanks for the way they pushed this idea. The use of a plain mount opens endless possibilities in the way of color, but the average photographer will fight shy of these, and especially will he keep clear of the amateur fashion of superimposing several mounts of different colors. The fine series of gray mounts which are obtainable are very safe to use, and there are many good tints or colors—such as the well-known "carbon-black," which should on no account be neglected. The whole philosophy of mounts would seem to be that a judicious variety is preferable to a keeping to one style, coupled with an effort to make work appear as though a special and different consideration had been given to each individual print.

---

WARM toned bromides may be obtained with sulphate of copper, 1 part, water, 100 parts; add sufficient carbonate of ammonia to redissolve the precipitate which is formed. Add 2 parts of this solution to 100 parts of a 2 per cent. solution of potassium ferridcyanide. Soak the prints well in water before applying the toning solution.

RETOUCHING varnish is compounded under many slightly divergent formulæ, but for practical work there is nothing better than a plain admixture of the two rock-bottom ingredients. Mix one drachm of powdered resin in one ounce of turpentine. Rub the least possible quantity on to the negative with a wad of cotton.

# MINIATURES.*

BY CARINE CADBY.

BEFORE going further into the details of finishing the face, etc., of the miniature, I should like to say a little about the background. It does almost as much for the painting as the glass when it is framed, which is quite as complimentary as a veil to a lady's face, bringing the whole of the picture together somehow, and softening any harsh effect. For painting in backgrounds the usual method is adopted, the surface is well washed over with a thick brush, given a few seconds for the moisture to soak in, and then the thickest brush is filled with the color desired, which is quickly put on, and with as few touches as possible. Three broad sweeps should be enough. What color depends, of course, on the worker's taste and the subject. But provided no very vivid color has been introduced, blue makes a very useful and safe background, and also suggests distance. It must be a pale wash, with just a suspicion of green to make it complementary to the complexion. My space is too limited to discuss dark backgrounds, and, as they are unusual, I can well let them alone, for if the print does not possess a light background, it must be vignetted. There is a rule, too, that the background must repeat every color in the picture, but this seems hardly necessary in our present stage, and some of the miniatures I noticed at the Paris Salon this year had just this simple background of pale, quiet blue.

Now to return to faces. Probably the photographer who has got so far is becoming more critical and ambitious about them, and, let us hope, the cold shadows of a platinotype print have begun to annoy him. He is quite right: these cold darks want warming up to look like flesh and blood; at present they detract from the natural look of the face. A correspondent has asked me, "Why do my faces look just washed over, and not painted?" and the answer is that the photographic look must be taken out of the shadows. A little light red must be used fairly dry on the brush, and put on to the darks, and wiped at once round with the second brush. Such distinct shadows as in the ear, round the nose, etc., should be worked over twice or three times to allow for the color sinking in.

Probably now the face has begun to look a little patchy, and requires some "mending up." Those who understand retouching will soon get into the way of using the brush instead of the pencil, and just spotting in the color where it is required, which in this kind of work is called stippling. For those who are not retouchers, let me just explain that stippling is putting in tiny touches with the brush just where there is a gap, and the color does not, as it were, join up. The surface must be made even, and for that reason little gaps and holes must be filled in. The marks of stippling should never show, any more than those of retouching, and for this reason it is advisable to use a magnifying glass.

I do not recommend too much stippling; my idea is that the effect should be gained with washes and ordinary painting, and the stippling only used as a means to rectify faults. This is heresy, I know, but a photographic miniature whose surface is one mass of stippling has a mechanical look. Many workers put on their washes in a casual and haphazard manner, thinking the stippling will be a cloak for all their faults; but bad work, like murder, will out, and the result is an unpleasant effect.

* Continuation of the article on this subject in our October issue. Reprinted from the *Amateur Photographer* (London).

---

*For Christmas Trade.* Take a piece of 110-pound cover-paper of pleasing color, 5 inches high by 6 inches wide. Fold this at the centre to give a 4-page folder 3 x 5 inches. On page 1 imprint the words Christmas, 1901, in white ink. On page 2 mount a carbon, Velox, or platinum vignetted portrait of a child, 1½ x 2½ inches. On page 3 tip a piece of thin bond-paper 1½ x 2½ inches, for a word or two of personal greeting. This specialty should find ready sale at $5 per dozen.

## PHOTOGRAPHIC PHILOSOPHY.

To those acquainted with Mr. W. M. Hollinger, more especially the Hollinger of these last few years, the address he delivered at the Detroit Convention would give little or no surprise. It was simply an outline of that admirable philosophy which has made him the happy man he is, and the successful photographer.

Years ago Mr. Hollinger was like many other photographers, always seeking for trouble and always finding it. In those days the skies were as gray and the world was as hard to him as they are to many professional photographers of to-day. But something set him to thinking, and in the end he came to an understanding with himself which changed both the man and his career. His address at Detroit was but a plainspoken account of his personal experiences since that understanding.

It is of great importance to every man that he should come to an understanding with himself. It means power and repose: two qualities which Mr. Hollinger possesses in a remarkable degree, and to which he owes much of his success and happiness. The understanding at which he arrived was that it is unwise, in professional photography, to attempt to please everybody; and that, if the photographer knows his business, it is the part of wisdom to please himself in his work. Once this understanding was complete, Mr. Hollinger turned right around as far as his work and life were concerned. He abandoned the vexatious attempt to do more business than the other fellow and all idea of meeting everybody's notions and everybody's prices. He set out to make portraits in which he himself could have pleasure, regardless of outside opinion. It was a revolution. Into the new work he put the new Hollinger, the real Hollinger—not the conventionalized Hollinger of early days—and the work changed. The reform succeeded, and operates to-day as successfully as ever. In Mr. Hollinger and his work we have a practical demonstration of his philosophy and its success. We have watched the change in his fortunes with great pleasure. We know few professional photographers who have so much joy in their work, or who have achieved so practical a success in so short a time. The two things are related, and you cannot separate them. You meet the man and leave him, carrying away the happiest of impressions. You visit the photographer and pay his ample price with the feeling that the money paid does not cancel your obligation—that he has given you something which cannot be measured with money. By his personality and in his work he is quietly but surely doing much to advance American professional photography and to raise the American photographer in the estimation of his fellow-citizens. More power to him and all the good things of life.

The subjoined comments upon Mr. Hollinger's convention address, by the editor of *The British Journal of Photography*, will interest those who read the paper in our September issue:

*The Personality of the Photographer.* Mr. Hollinger, in a speech quoted in the *Journal*, upon the art of being happy, or rather being jolly, seems to have attained to a high standard of Tapleian philosophy and its practice. We hope he will be able to retain it until he dies of a green old age, and that he will further direct that his tombstone be suitably adorned with laughing cherubs around a heavily gilded statement to the effect that "it is all right." In common probably with the great majority of our fellows, we cannot wing it so freely in the blue. Our stomachs and livers, maybe, are not so good as Mr. Hollinger's. Possibly our experiences of life also have gone to prove that there are depths not to be bridged so easily, nor with so light a bridge, as he would make out. We cannot help knowing that there are hospitals within whose walls things are anything but all right, wrongs that some must make serious efforts to right, ills and woes generally find a readier soothing in the unbidden tear of sympathy than any boisterous assertion that "it is all right." Still, we fully agree with Mr. Hollinger as to the good effect a cheerful appearance

must have upon those with whom its possessor comes into contact. Applied to the case of the photographer, there is no doubt that a pleasant expression of face, an amiability of manner, and an evident desire to please, tell heavily in his favor all round. The customer sympathetically responds with an expression and pose that make for a good picture, he is not so likely to be so particular over the price, and will give his circle of friends and acquaintances the benefit of his own favorable experience, so nicely colored as to induce them also to enter the studio. It is not given to all to be constitutionally cheerful and look at the bright side of things. Their brain molecules are such as will not group themselves into the necessary combinations, nor vibrate to the stimuli, that mean smiles. They do not see jokes, or if they do they treat them in much the same sober fashion they do texts and epitaphs. Practice may do something to counteract such a state of things, but not much. Besides, practising smiling with a customer is risky work. Nothing is more readily detected, or more instinctively disliked, than an artificial smile. However, there is comfort for those whose mouth corners droop instead of turning upward. If the old saying "that many a bright smile covers an aching heart" be unfortunately true, it is quite as true on the other side that many a sober look covers a bright and happy heart. Many grave faces are extremely taking and pleasant. So let the non-smiling photographer take heart of grace—his fortunes need not necessarily be bound up in a smile. Far more important than a smiling demeanor, and reaching more deeply, is the ability to read character and act upon the reading. This, like the faculty of looking at the bright side of things and smiling, is something of a natural gift, although possessed by most in more or less degree. In all cases it lends itself eminently to improvement by the habit of intelligent observation.

*The Personality of the Sitter.* But necessarily associated to practical purpose with understanding a customer is the acting upon the knowledge, and handling him to advantage. The studio offers a fine field for observation. Every customer naturally wishes to look his best, and in the effort to do so is more or less off his guard for the time being. The slightest action will betray the weak point and give the observer the key to character. To his detriment and business loss many a good man is slow in using the key. He should do so boldly. The pose of the town councillor, for instance, is dignified. He is a good and worthy man, and fully deserving of the mayoralty that will probably be his next year. Let him be handled on his own ground. Let the commonplaces of the weather go, and do not attempt to explain any photographic matter to him. Introduce instead the leading matter of municipal interest — the new water works, the electrification of the tramways, the appointment of borough treasurer, or what not—and listen to what he has to say. He will be interested, and will show it. So will you, or ought to be, if anything of a citizen. The dignity of the vicar is of a different, and a higher, kind. He is a true man, so deal gently with his innocent little vanities, the true cut of the ecclesiastical waistcoat, or the shapely calves outlined in the archdeaconal gaiters. He can be very interesting upon many subjects—may even know what the archdeacon's duties are. Give him a fair chance, anyhow. It will pay you if it ultimately means two dozen prints instead of one, with a bazaar possibly at hand. But town councillors and vicars will not bring a living. Very true, but the principles of action indicated will apply equally well in all other cases. If the favoring of the side of the head is to show wealth of hair, state frankly that you would like to do justice to the undoubtedly beautiful feature. It will mean another customer interested and pleased—still more so if opportunity be diplomatically offered to the statement of how much longer these particular tresses are than the normal. It is all fair enough, fairer probably upon the whole than the pointed and waxed ends of the moustache of the would-be carping critic. By the way, let the same moustache come out well, with the full aid of the retouching desk if necessary. Ringed fingers may be brought to the front, with a request that the hand be naturally arranged to show them. It may be poor art, but it

is an uncommonly good way of making a business successful. Every photographer has the opportunity at the same time of becoming a philosopher. And, although his philosophy may be tinged at times with a dash of cynicism at the extent of human vanity, upon the whole it will be redeemed and given a healthier color by many pleasanter and higher experiences. Even vanity itself, in reason, and the right people, can be pleasant and refreshing. He must be a dry chip who does not respond in mood to the winning smile of the young bride, her interest in the young fellow at her side fortunate enough to call her wife, her desire to bring the wedding-ring well into evidence, her lightsome little airs and ways generally. Here is a chance for a sympathetic agreeability of manner to keep the pleasantness alive, and here also a chance for a final earnest, "I hope, I am sure, that you will be as happy throughout life as you are to-day." Venture boldly on it, whatever the degree of the customer. It is certain to be acceptable if properly put, and will be remembered with pleasure always.

## PRACTICAL POINTS FROM THE STUDIO.

*Cover your dishes*, says a contributor to the *Photographic News*. It is a good habit to get into to always cover the developing dish in some way in order to prevent the light of the ruby lantern having too much of its rays bent upon the plate in the developing solution, the reason being that after a time, especially if development is somewhat prolonged—as in the case of an under-exposed plate—the red light will cause the plate to fog. This is especially the case in regard to rapid and isochromatic plates, and these, when being worked with, should be especially guarded from undue action of the ruby light. It is best to always have a cover of some sort—*i. e.*, cardboard, lid, etc.—at hand, so that one may place it over the developing dish as soon as the plate is placed in the latter, and only remove it for the brief periods of examination. If the reader will develop two plates at the same time, having one protected by a cover and the other unguarded from the ruby rays, he will at once perceive the improvement effected by using a cover when developing.

CHRISTMAS and the rush season is coming. Many photographers in the more northerly latitudes are finding the days short, and some of them will use that old gag of "dull light" as an excuse for slow delivery of prints. This may do at a pinch to stave off importunate customers, but it surely is not calculated to bring grist to the mill. With the rapidity of present day printing-out papers, with bromide, Velox, and other development papers, there is no possible warrant for the old line excuse, "no light."

*Studio Blinds.* Nothing will make the studio look untidy more than dusty, wet-stained, and torn blinds. Some attention should be given to the blinds, to keep them in repair, free from dust, and in good working order. When not in use they should be closed up, or pushed back from under the glass, to prevent the action of the sun and any wet which may leak through. Exposure to the sun and wet will quickly destroy the material, causing it to rip like paper at the slightest touch. Spring roller blinds are not at all convenient in the studio, and it may be taken that the more simple in construction the better the blinds for all practical purposes. The best way to suspend blinds is to stitch rings on the top and bottom of each blind, then to pass through them a wire, and stretch it tightly from one extreme of the glass to the other. Six wires should be used, admitting of three series of blinds. Each blind can be some three feet in length, and a dark and light one be hung alternately. A dark blue color is one of the best. A pole can be employed to move the blinds along.

By these means any scheme of light can be speedily arranged, and the dark blinds especially will be found very useful when suspended in this manner. Of all blinds, too, these are the most unlikely to get out of order.—*Photo. Chronicle.*

## A METHOD OF MOUNTING PHOTOGRAPHS.

To mount photographs without cockling, says G. T. Harris, in the *British Journal of Photography*, is a consummation often attempted but seldom achieved. Solutions having this end in view are plentifully strewn along the path of the photographer, and should make his life a bed of roses if their performance was equal to their promise, which is seldom the case. The portrait man who confines his mounting to cartes-de-visite and cabinets is seldom disturbed by this evil, as the subsequent operation of burnishing compels the cards to assume an even surface. The evil is most felt by the photographer whose business necessitates the use of mounts not amenable to the coercive treatment of the rolling press, and pre-eminently by anyone who has the mounting of photographs on thin supports, for insertion in reports and works of a similar character.

Mountants in which the greater part of the necessary water has been replaced by methylated spirit have been suggested as a remedy; but, while they lessen the evil, they do not entirely remove it. If buckling of the mount is to be cured, the prints must be mounted in a dry state, and the film of mountant borne by the print must be just sufficient to attach it firmly to the mount and no more. The great virtue of the method here described consists of the marvellously thin film of tenacious mountant applied to the print in its dry condition, shrinkage by this means being entirely obviated. A drawing-board with a perfectly smooth surface and of fair dimensions, an ivory or bone burnisher attached to a short handle, with some common glue, are the principal requisites. Take, say, a quarter of a pound of the glue broken into small pieces and cover it with water in a clean gallipot, large enough to allow for the subsequent swelling of the glue. Place on one side until the glue has become thoroughly permeated by the water, then pour off the excess and dissolve the glue in the water it has absorbed, by placing the gallipot in a vessel of hot water. The solution tested with a piece of blue litmus-paper will show a distinctly acid reaction, which must be carefully neutralized by adding some solution of carbonate of soda. The amount of water absorbed by the glue will probably be too little to give it the best working consistency, and, if this is the case, sufficient should be added to make it about the thickness of ordinary molasses. Careful filtration through a cambric handkerchief, and the addition of about ten grains of thymol, completes the preparation of the mounting solution. As glue deteriorates by frequent and prolonged heating, it is preferable to make up a stock solution, from which sufficient for the work in hand can be taken in the form of jelly, melted, and used up right away.

The finished prints, dried and trimmed to the required size, are placed on the boards they are to occupy when mounted, and, as it is impossible to remove a print for re-adjustment once it is laid down for final mounting, the wisest course is to indicate by light pencil marks on the mount the exact position the print is to occupy; then it may be laid down accurately and without any indecision. A small gas or oil stove is required on the mounting-table to keep the glue liquid, but maintaining the solution in a constant state of ebullition throughout the operation is unnecessary and harmful to the glue; the flame should be regulated so that the mountant is kept just at the melting-point.

Place the drawing-board beside the gas stove, and with a house-painter's brush of good quality and size spread the glue over an area considerably exceeding the dimensions of the print to be mounted. A thin coating of glue evenly applied to the board is the end to aim at, to accomplish which the brush should be worked in horizontal strokes, crossing these with others at right angles. Have at hand a small pile of paper cut into pieces somewhat larger than the print to be mounted (old newspapers answer admirably for these pieces), lay one down on the glued patch and press it well into contact by passing the closed hand across it in all directions. Raise one corner of the paper, and slowly but firmly strip it from the board. Repeat the operations of glueing the board (in the same place) and stripping the newspaper two or

three times, when a beautifully even cushion of glue will remain on the board.

Mounting the prints is the next step. The cushion of glue obtained on the board has to be coated with glue for, say, every second print, but the amount applied must be as small as possible. After applying the glue the print is laid down upon it, a square of the waste newspaper laid over the print, which has then to be rubbed well into contact with the glue. Raise a corner of the print with the point of a penknife and strip it from the board, as in the case of the newspaper. Care must be taken when handling the print in its glued condition to keep the fingers well beyond the edges of the print, in order that no glue may be abstracted from the edges. Lay the print quickly down upon its mount; with a clean, soft linen duster smooth it everywhere into contact, place upon it a square of photographic drying-board, and with the bone burnisher go over it in all directions, using considerable pressure. The finished result is a mounted print that shows no signs of buckling, and which adheres to the mount with perfect tenacity.

## THE MAN BEHIND THE CAMERA.*

During the last few years the photographer has resolutely forced his claim to the title of artist, and by this time the "art photograph" has come to be a recognized commodity. While the contest was at its height the forces were divided mainly between the enthusiastic button-presser on the one hand, and on the other, the resentful conservative practitioner in recognized branches of the fine arts. These were the telling forces in the discussion. Minor debates were carried on in other quarters, and the half-hearted opponent of the camera injured the cause of the opposition by the fear of finding himself on the wrong side, while the claimants' arguments suffered from the indiscreet utterances of the ill-informed, as the man of science who at a Royal Academy dinner enlarged on the admiration and delight that Michael Angelo would have felt at the sight of a photograph.

The latest apologist, Mr. C. H. Caffin, who is neither extremist nor trimmer, is the author of one of the most elaborate and interesting briefs that have appeared on the photographer's side. "In the early stages of photography," he says, "man's interest was captured by the camera's ability to record facts; to-day the artist's aim is to make it record his impressions of the fact and to express in the print his personal feelings." Now, this may be done, presumably, by careful selection and arrangement, or by manipulation of the negative or print, or by both means. Among the illustrations accompanying Mr. Caffin's articles there are backgrounds etched or washed in; in one case the couch on which the model was resting has been carefully eliminated, and something supposed to represent water put in its place. Now, when it comes to liberal changes of this sort, how can we possibly accept the print as a photograph?

Consider a parallel case. If some ingenious person armed with a phonograph were to work his way into a select company of wits, set his instruments agoing, and afterward transcribe the dialogue recorded, ought we to call him artist or give him credit for the result? On the other side, were he privately to revise the raw report, striking out an impertinent passage here, inserting an apt retort there, giving a pleasant turn to the colloquial crudities, and rounding off the rough sentences, could the result properly be called a phonographic record? In the one case, supposing the dialogue to be entertaining, we might give the phonographer credit for a capacity to enjoy and understand good conversation; in the other, we might allow a degree of creative power, great or small, according to the degree of success in the changes made. But supposing these changes to involve anything besides frank emis-

* The book referred to in this editorial from the New York *Evening Sun* is "Photography as an Art," by C. H. Caffin, just published. It is one of the most interesting books upon photography which we have seen in a long time, and profusely illustrated with engravings from photographs covering the best pictorial photography of recent years. Price, $3. New York: Tennant & Ward.

sions, we could by no means accept the result as the work of the phonograph.

As soon as the photographer puts his hand to negative or positive for the purpose of modifying, draughtsmanwise, the work of the lens, the result ceases to be a plain photograph, and becomes a hybrid—part photograph, part drawing. The plain photographer can still show taste in the nice arrangement of his subject, and, to some extent, in the agreeable matching of tones; but, after all, can this be called an art-in-itself? Mr. Caffin reckons creative power "the distinguishing characteristic of the artist." Surely, for this very reason, he ought to exclude the photographer, whose task ends where the painter's or draughtsman's begins.

It is unlikely that a discussion will ever arise on the use of casts from nature in the execution of sculpture, but if it should it would be a question of how far the sculptor is justified in relying on such helps. The notion of a modeller conceiving some method of manipulating plaster casts, revising mechanical reproductions to bring them in closer accord with "his impressions of the fact," and then claiming a distinct and independent place among artists, is too grotesque for serious consideration. Yet the "art" photographer's claim is not less extravagant.

## THE PERMANENCY OF PLATINUM PAPER.

BY CHAPMAN JONES.

THIS is a subject about which doubts appear to arise from time to time, and judging from the way in which it is sometimes referred to in connection with the permanency of prints in general, one who knew nothing about it might well imagine that silver prints were far preferable to platinum prints as far as permanency is concerned. The great age of some silver prints that show no signs of deterioration is often insisted on, and as often the fact that platinum prints are liable to change. It is not, however, always made clear that in both cases it is the exceptions, indeed, the very rare exceptions, that are referred to, and that they attract attention because they are unexpected is not unaccountable.

Perhaps the most important point of all is too often lost sight of altogether, namely, that when a silver print fades it is the image that changes, while in the case of the platinum print the image remains unaffected, and it is only the paper with the minute remains of the sensitive materials that shows an alteration of color. A cursory consideration of some specimens might lead one to the opposite conclusion. Those who have seen a platinum print that has gone to a yellowish tint might well be excused for imagining that the image itself is affected, for the altered color pervades the whole, and the mere coincidence that the color is somewhat similar in tint to that of a faded silver print leads to the idea that as it certainly indicates instability in the one, it also does in the other.

It is now about fifteen years ago that I showed that the original color of the platinum print might be restored by the action of powerful reagents that have a tendency to dissolve away and remove material from the image, and no power to "restore" changed material in the ordinary sense of the word. Any attempt to restore a faded silver print must be in the direction of changing the color of the material that forms the image or of adding to it, and not by methods that tend to remove extraneous matter from it. This shows the radical difference between the two cases, the similarity in color being a mere accident of circumstance. Since I indicated the general principle of treatment in the case of platinum prints, several other workers have taken up the subject, but everyone, I believe, has followed on the lines I laid down. Some have recommended feebler reagents, such as acted only incompletely in my hands, perhaps because the prints they operated on had not changed so conspicuously as mine, and the incomplete effect left so little of the result of the change that it was not perceptible.

To restore a changed platinum print, I recommended, and still use, a mixture of hydrochloric acid and chlorine water, conveniently made by adding a few drops of sodium hypochlorite solution to dilute hydrochloric acid (one of acid to ten or more of water may be used) until the odor of chlorine is distinctly noticeable. I found that neither hydrochloric acid nor chlorine water alone was effective, though each did something toward the desired end. Certain organic acids and compounds of the kind that have since been recommended by others gave only partial results in my hands. And as they are more troublesome to prepare and more costly than the simple acid and chlorine, they appear to be in every way less advantageous.

The two questions that naturally arise in connection with this matter are (1) What is it in the paper that is changeable? and (2) What outside influence determines the change? In a paper read before the Royal Photographic Society in 1895 I showed that a paper once coated with ferric oxalate could not be washed quite free from iron by the use of hydrochloric acid and water, and that the iron remaining was competent to produce such results as had been observed.

A few weeks ago I learned for the first time, from an article in another journal, that Mr. Haddon had "partly disproved or combated" this result by showing that traces of iron could be discovered in the paper before coating. This may be the case, but it has nothing whatever to do with my results or the deductions from them, because the iron I referred to remained on the surface of the paper to which it was applied, and was not to be found on the other surface. It is the iron salts remaining that are acted on by the catechu when tints are toned in the manner suggested by Mr. Packham, though generally not only the iron that cannot be washed out, but a larger quantity left because of the incompleteness of the ordinary treatment with acid baths.

Although the iron salts can produce the observed results, the platinum salt used, when once put upon the paper, cannot be completely removed from it. This fact, which I pointed out in the paper above referred to, has recently been confirmed by Dr. Jacoby. It seems, therefore, that in a platinum print, however carefully prepared, there is a residue of iron and of platinum compounds in some changeable form over the whole print. This has led to the statement that there is no perfect fixing agent known for platinum prints. But anyone who makes such a statement is, I consider, very worthy of severe rebuke, because the statement is much more calculated to deceive than to instruct. It does not appear that anyone has yet found that platinum prints are sensitive to light. So far as light is concerned, therefore, the fixing does appear to be complete. The prints remain sensitive to sulphuretted hydrogen, but if this is to be the criterion of fixing, then we may say that no silver print or negative has ever been fixed. And this is a much more true statement than that platinum prints cannot be fixed, because, as pointed out above, in the case of the silver print, the image itself is changed, while in the platinum print no one has yet shown it possible to affect the image at all, nor has anyone yet shown it possible (so far as I am aware) to change a platinum print in any way so that it cannot be easily and thoroughly restored to its original condition.

The only common substance that is likely to affect platinum prints is sulphuretted hydrogen. The extent to which it is likely to do so may be judged from the extreme rarity of changed platinum prints, even though probably not so many as one in a million is washed (or cleared or "fixed") as well as they might be. And it must be admitted that the less carefully washed they are the more liable to change they remain.

The summing up of the matter, so far as it immediately concerns the practical photographer, is that no form of photograph is more permanent than a platinum print. There are reasons for thinking that none others are likely to be equally permanent, but that matter need not be discussed here. Of course, every photographer worthy of the name will work carefully, he will wash his prints well, and mount them on good boards. But failure in these matters has never been shown to be absolutely disastrous, as in a discolored print the image is unaffected and the dis-

coloration may be got rid of. And, finally, there is no need to look for new methods of treating or "fixing" prints, but only to follow with intelligent care the methods that have been in use for so long.—*Amateur Photographer* (*London*).

## SINGLE LENSES FOR ARCHITECTURE.

BY H. FENNER.

THERE are certain things that are a part of every photographer's common knowledge, and one of these things is the limitation of the single lens. A single lens gives distortion; according to the face of the lens before which the stop is placed, so do we have "barrel" or "cushion" distortion. So we are told, and to a certain extent told truly, and yet thousands of little box cameras are turned out with single lenses, and the inexperienced amateur snaps the houses across the way. These two things seem incompatible, and yet they are both in part true.

Anyone who works with a doublet lens knows that either half may be used as a single landscape; but at this they stop short.

If the limitations of the single lens are clearly understood it will be found that there are many "straight line" or architectural subjects which it is perfectly competent to record.

The single lens has not the same range of correct covering power as has the double one. Suppose we have a lens of 10-inch focus fitted to a 6½ x 8½ camera, and we unscrew one combination and get a lens of 20-inch focus. Now, if we use this 20-inch lens in a large camera, such as 20-inch lenses were fitted to in days before long-focus lenses became abnormally fashionable, we would probably find curved lines instead of straight. We would also find an unevenness in illumination, the plate being less and less lighted as we get further from the centre of the plate, until the corners would be practically without any light at all. In brief, we would be straining this single lens altogether beyond its powers. But if the single lens had been used on a plate only the size that was covered by the double lens —thus embracing a much smaller angle, for the single lens is the longer focus—we would find that it was working well within its powers, and capable of satisfactorily recording a church or a high building. I do not know that there are any definite mathematical figures showing the limitations of the single lens, but if a double lens has a focus "the length of the longest side of the plate it covers," it will be safe to use a single combination of that lens on the same size of plate.

The question of stop is of considerable importance, though, fortunately, it is extremely simple. *F* values are, of course, purely relative, and a definite stop on a doublet lens will if used with a single lens of exactly double focal length be just half the *f* value and require four times the exposure. Single lenses, too, are not workable with so large apertures as are double lenses; and as the single lenses which are unscrewed from doublets are not primarily made for such use, but rather for their fitness for part of a whole, they have often less practical working aperture than is the case with a lens specially constructed for single work. This will mean still further stopping down and loss of speed, if sharp definition is desired. But with architectural subjects there is no special need for rapid exposures, and rapid plates will prevent an exposure being tediously long.

There is one rather important peculiarity of a single lens which is particularly exasperating in interior work—it has a strong tendency toward flare spot. This is due to the stop being placed too near the lens, and can be cured by separating the distance between them. This is best done by a lens-maker who can supply a lengthening band to the lens tube. The combination to be used can then be screwed from the diaphragm and this little lengthening tube screwed between them. If a single lens is to be used to any extent this or some similar fitting will prove a necessity, for in

many cases it will be simply impossible to avoid a flare spot without it.

The use of a longer focus lens in architectural work is not merely an "added" power; it is often a very *useful* power. For the wide or medium angle is but a necessary evil, and there are many times when the power to readjust things and get further from the subject is a great pictorial help. The presence of the other buildings, or the opposite side of the street, the presence of pillars or walls in interior work, often make us compromise with the wide angle; but where we can retreat a little way from our subject we will find that our picture often gains much by the unscrewing of half the lens and a readjustment of the camera bellows.

## JOHN BULL AND HIS TRADE.

Our exceedingly enterprising neighbor—also competitor, customer, and very good friend—late sole purveyor to their majesties the peoples of the world—John Bull, to-wit, has just triumphed gloriously over crude Cousin Jonathan.

It would seem that in the past Cousin Jonathan has been in the habit of unloading surplus stocks—and stocks that were *not* surplus—on his poor elderly friend. Now John has retaliated, and a pæan of triumph wafts gently through the air.

A dusky gentleman, who, however, is no barbarian, but the recognized ruler of an African country, has placed an order with John Bull for a barbarous camera. This dusky gentleman—no other than the Sultan of Morocco—has defied the traditions of the orthodox faithful, and intends to picture things on the earth by means of photography. To this end he has ordered a camera worthy of royalty, and attains his end by having all the metal-work of "eighteen-carat hall-marked" gold. The adjectives mean that the British Constitution guarantees the gold to be fully four-fifths pure, and with a bare 20 per cent. of alloy. So far we may sympathize with the purchaser of the camera, and congratulate the camera-makers who were lucky enough to get the order. But behind all this we hear a vindication of the old theory that John Bull is in a class alone for the building of "fine cabinet work"—those brass-bound mahogany constructions which will stand a century in the tropics, and which require a pack mule for their transportation. It is rather a barren honor to feel that one's country is pre-eminently able to meet the rush of the million into photography with an ever durable mahogany box. This box industry may keep half a dozen aproned and spectacled artisans lovingly giving a final polish to woodwork with the ball of the thumb; and in the meantime Rochester hums, and as night falls electric light fairly oozes from busy factories racing to keep up with a great demand.

John Bull is going to invade us with dry plates. It is rather a curious invasion, and reminds us of those relationship conundrums which puzzle the children. A dry plate, made in France, represented in part by a British shareholder list, proposes to open a factory on this side. An American factory, employing Americans, will coat the glass at present, presumably to be imported. American advertising will make the plates known, and American drummers will urge the dealers to stock them. So it is. If John Bull tries to invade us he has two courses. Either he must wait, impotent, and "watch what the end will be;" or he may take a steerage passage over here, take out his papers, and set up shop under the Star-spangled Banner.

But this is rather an old story with John Bull. He has seen his tide of American trade flood to high-water mark, and seen it ebb—never to return. And now he feels the return swing. He is a genial soul, and takes it all in good part. He hangs our backgrounds, and says "how artistic," and mutters that nobody at home can paint a background worth a curse. And he laughs at the homemade camera as he presses a Rochester button.

For as against the rest of the world there are but two peoples—the sheep and the goats, the British and the foreign; so in himself there is but his circle and the outsiders; and if the outsiders—the men who don't live in his street, cannot make

him things as pretty as can the American —well, he is sorry for the outsider, and rather despises him; but for himself he will buy the thing that suits him best.

But gloating over barren honors will not prevent the coming fight. The last twenty years has seen a mighty industry grow from nothing, until now acres of factories scattered over the land supply its every need, and make a surplus which is percolating to foreign shores. Thirty years ago John Bull held the commercial world in the hollow of his hand. The inevitable trend of things has wrenched this monopoly from him, and is giving the lead to another. He frankly recognizes this, and sees that it must be so. But there is a feeling—and it rankles in John's own bosom—that it is not merely that others are catching up, but that he is himself slipping behind. The next twenty years will show, for we are now reaching after wider fields. If it is true that John Bull is just a little behind the times, then his trade with the Orient and with India is not worth seven years' purchase. Competition is healthy, whether between firms or between nations; and there is room enough for all. John Bull must learn that gold-bound cameras are pretty eccentricities, and that new plate companies are merely playing into our hands, or he may find that he is likely to experience a very bad quarter of—a century.

## ELEMENTS IN BUSINESS SUCCESS.

THE photographer in business grumbles that his trade is overdone and that profits have been reduced by unfair and excessive competition to a very low level. Members of every other trade and profession say much the same about the ones they are in —barring possibly the undertaker, and in his case the reasons for his forming the exception are of so peculiar a cast that, owing to them, the trade will probably ever remain more of a close, and so a profitable, one than any other. It must be granted that competition all round is keen, and that profits and prices would be more agreeable if they were higher. But what is the use of grumbling? No amount of grumbling will turn the moving hand on the commercial dial back to any point beloved by the praiser of times that have been. Besides, the condition of mind begotten of grumbling is apt to cripple the work that must be done, whatever the conditions may be. On the other hand, it is fortunately as true that a cheery determination to make the best of things as they are will react for good. Under its healthier stimulus many points will be noted where improvements can be made that will better the position. The photographic field forms no exception to the action of the rule that success is always directly proportionate to the quality and extent of effort put in to gain it. The man who can better an existing order of things stands to gain. This is clear enough when noted in large things. It is equally true, if not always clear, in smaller matters, and success upon the whole is due more to a persistent looking after the many small things of life than after an occasional great one. More successes could be counted among men who have made a point of keeping their shop windows clean and attractive than among those who have aimed at the evolution of a new process.

Does the professional photographer make the best use of existing conditions? Could he not, whether disposed to grumble or not, improve his position and his returns by attention to some of the small things referred to? We think he could. The great thing is, of course, to attract the customer. Start at the common-sense bottom of the question, by taking an ordinary individual walking past a photographer's window, without any idea in his mind of having his own photograph taken. What is most likely to induce him to stop, look in, and start upon a mental path of favorable determining? Will the orthodox window do so? The extent of grumbling prevailing seems to point to a "No" as an answer. The fact is that much more could be made of the window at little or no extra expense. As it is, there are too many prints in it. Attention and interest

are frittered away instead of being concentrated. The arrangement of the prints, too, upon sloping stands of colored velvet or plush, the darker or lighter effects of protection from, and exposure to, the sun determined by the different positions of a former batch, showing here and there, is poor and ineffective. The whole window looks dry and spotty. It may be perfectly clean and free from dust, but it lacks coolness and freshness. It cannot be called inviting. Very good work is often displayed in such a window to the detraction of half of its just merit. A carefully selected quarter of the usual number of pictures; an enlargement or two suitably placed; light, cheap, soft drapery of a pleasing tint, that would admit of frequent renewal, instead of the permanent, heavy, and dull-looking velvets and plushes, would make a great difference in general attractiveness. A few ferns would still further add to it. The coolness of living green is extremely welcome in the photographer's season of summer, and makes capital dressing for the bait. It requires something of artistic taste to arrange in this fashion. But the photographer is more likely, from the nature of his work, to possess it than many another, and the reason that he has not already tried it is probably more from not having thought of it than any lack of capacity. His wife would be of great assistance to him in such a field, for without going so far as to say that women have keener artistic instincts than men, it must be admitted that they are far more deft in arranging the constituents of a happy artistic combination. We are assuming, of course, a good grade of work, for while much first-rate work fails to take from being poorly displayed, no setting, however good and artistically arranged, will pass off bad work. Still, there is a happy knack in selecting specimens of good work. Beyond beauty of face or form, so hard to get hold of, style and character of dress tells. This, perhaps, is a question more for the wife or lady friend; but if there be specimens close enough to each other in artistic merit to cause hesitation in deciding which is the better, let the one with the more fashionable dress be chosen. It will be far more likely to favorably take the eye of a lady customer, and unconsciously make her regard the photographer as up to date. Frequent changes should be made, and care taken to think of appropriateness to season, in showing light, airy dresses in summer, and warm, comfortable-looking ones in winter. If otherwise, a certain on-edgedness is produced in the mind of the one looking at them that is not the most conducive to the feelings leading up to ultimate business.

Prices should be also marked upon a good card that will not fade in the sun. Now, as to prices, it is most pleasant, undoubtedly, to quote and sell by the dozen. The half and quarter come next in order. But would it not be wise to quote for the single copy as well? The photographer must not forget that prices are cut in other trades than his own, and that those engaged in them find that the expenditure upon a luxury to the amount charged for even a quarter of a dozen must very often be thought over and arranged for. They might manage one, say at a shilling, at once, and it is best to catch when the impression is most favorable. The shilling copy would also act as capital bait in the case of ampler means. There is due proportion of profit in it to the photographer, and if he is alive to the value of advertising, it is far superior to any alternative method in vogue. It offers a chance to the enlargement firms as well, we admit; but that phase of advertising will soon pass away. The exhaustion of the novelty that is essential to the success of such an advertisement to them is the photographer's best hope. The same considerations apply to the reception-room as to the window. A few photographs well arranged, light airy curtains, a large case of green plants, showing that they have been recently watered, thrown into the room by lifting the bottom sash of the window, would have a very different effect upon the customer to the existing arrangement of the majority of such rooms.

Much has been written about the studio from the photographer's point of view. It might be just as well to consider it from that of the one who has entered it to be photographed. It may be perfect as to position, size, incidence and arrangement of light, and yet be anything but attractive to a visitor. The two great drawbacks, as

a rule, are heat and litter. The former is hard to get over in a glass house; but it can be greatly reduced. The coolness of green paint over the glass and walls is out of the question; but there is no reason why here again the fresh green of ferns and India-rubber plants should not be introduced. (The possible smart critic may make a point by stating that it is a photographer's business he is trying to run, and not a florist's. But we hold to our point, a good picture is all the better for a wide setting of margin.) Larger sections of side and roof should also be made to open. Although in a town studio there will be the drawback of "soots" and dust to contend with, muslin stretched over light bamboo frames would do much to counteract it. Top ventilating currents above the customer's head are very practicable with the exercise of a little ingenuity, and the use of a cheap ventilator or two. The litter of dusty backgrounds, the toys that are supposed to make children look natural, an odd camera stand, the rustic stile, and elaborate balustrade, ought to be kept carefully out of sight. They are bad enough as accessories to the picture, but doubly so as studio furniture. We ask the unbiased reader if the customer in front of the camera in a studio bearing evidence of being carefully looked after, with no litter, and curtains lightly swaying in cool air, is not far more likely to induce the happier expression desired for impression upon the plate, than under the reverse conditions generally obtaining? It should go without saying, that the freshness in all the appointments of window, reception-room, and studio should extend to the operator himself. We do not say, pray note, personal cleanliness. That may be, and we presume it to be, of the first order. But there is an alert freshness of dress and manner that is quite independent of this. Ninety-nine customers out of a hundred would far rather see the operator in comfort in a light summer jacket, or even in shirt sleeves, than in the orthodox tail coat, etc. Why — but this article is long enough already. It is intentionally more suggestive in style than more fully elaborated. There are a hundred different ways, and all perfectly legitimate, of catching customers. Let the professional, with more time on his hands than he would wish, think them out for himself, now that the idea has been placed before him. The dull winter season is coming on when, in the natural order of things, he will have plenty of time to think. We trust that he will do so to such good purpose that next spring and summer will mean a material increase in his returns. He can be very certain that the more original thinking and novelty he throws into his business the more money he will make out of it.—*British Journal of Photography.*

## DEVELOPING FORMULÆ FOR USE WITH LOVELL PLATES.*

THE formulæ presented are mostly original, and all have been carefully tested. In some cases they are nearly the same as those usually recommended. In other cases they are very different. I should dislike to claim any infallibility in such a delicate matter as the formulation of developers for dry plates, and so it may be understood before going further that anyone who has better formulæ will still be permitted to use them.

In the following recipes I have given the quantities both in the metric system and in the style of the Middle Ages—minims, drachms, and ounces. Anyone who would prefer to reckon in pounds, shillings, and pence rather than in dollars and cents is recommended to eschew the metric system. It is too easy for such folks. Anyone who would sooner follow a sane and reasonable system should learn the metric measures at once. Metric weights and metric graduates can be bought of any large dealer in chemical supplies and of some of the more progressive photographic supply-houses.

I give these formulæ as nearly as possible in the order of my preference for them, basing that judgment strictly on the development of Lovell plates. For other

* By F. A. Waugh, in "How to Develop Lovell Plates," issued for free distribution by the Lovell Dry Plate Mfg. Co., New Rochelle, N. Y.

brands of dry plates my preferences take a different order.

### *Pyrol.*

A.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Sulphite cryst. | 125 grammes | 4 oz. |
| Pyrol | 30 grammes | 1 oz. |
| Sulphuric Acid | ½ c.c. | 5 drops |

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz |
| Sod. Carb. cryst. | 125 grammes | 4 oz |

For use take 1 part A, 1 part B, 8 parts water, and add a little potassium bromide.

### *Pyrogallol.*

A.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Sulphite cryst. | 100 grammes | 3 oz. |
| Pyrogallol | 15 grammes | ½ oz. |

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Carb. cryst. | 75 grammes | 2½ oz. |

For use take equal parts of A and B, and don't forget the potassium bromide.

### *Adurol.*

A.

| | | |
|---|---|---|
| Water. cold | 500 c.c. | 16 oz. |
| Potassium Meta-bisulphite | 50 grammes | 1½ oz. |
| Adurol | 10 grammes | ⅓ oz. |

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz |
| Potassium Carb. | 60 grammes | 2 oz |

To develop take equal parts of A and B, or, for softer effects and more detail, take equal parts of A and B and water. Add potassium bromide freely, especially in the former case.

In place of the potassium metabisulphite sodium sulphite crystals may be substituted, 80 grammes or 2½ ounces.

### *Tolidol.*

A.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Sulph. cryst. | 35 grammes | 1 oz. |
| Tolidol | 17 grammes | ½ oz. |

B.

| | | |
|---|---|---|
| Water | 500 c c | 16 oz. |
| Sod. Sulph. cryst. | 70 grammes | 2 oz. |
| Sod. Carb cryst. | 175 grammes | 6 oz. |

To develop take 4 parts A, 3 parts B, and 10 parts water. For fine, snappy negatives, give a long exposure and add 1 part potassium bromide to this formula.

### *Metol.*

A.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Metol | 8 grammes | ¼ oz. |
| Sod. Sulph. cryst. | 60 grammes | 2 oz. |

Dissolve the metol first.

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Carb. cryst. | 75 grammes | 2½ oz. |
| Potas. bromide | 1 gramme | 15 grains |

To develop take equal parts of A and B, or for softer negatives, or for snapshots, take equal parts of A and B and water.

### *Imogen.*

A.

| | | |
|---|---|---|
| Water, boiling | 500 c.c. | 16 oz. |
| Sod. Sulph. cryst. | 50 grammes | 2 oz. |
| Imogen | 15 grammes | ½ oz. |

B.

| | | |
|---|---|---|
| Water, hot | 250 c.c. | 8 oz. |
| Sod. Carb. cryst. | 125 grammes | 4 oz. |

To develop use 2 parts of A to 1 part B, with an abundance of potassium bromide. For snapshops use 2 parts A, 1 part B, and 1 part water, with less bromide.

### *Ortol.*

A.

| | | |
|---|---|---|
| Water, cold | 500 c.c. | 16 oz |
| Potas. Meta-bisulphite | 4 grammes | 60 grains |
| Ortol | 8 grammes | ¼ oz. |

B.

| | | |
|---|---|---|
| Water | 250 c.c. | 8 oz. |
| Sod. Carb. cryst. | 30 grammes | 1 oz. |
| Sod. Sulph. cryst. | 45 grammes | 1½ oz. |

For use with Lovell plates take 2 parts A, 1 part B, and 2 parts water, with as much bromide as the exposure will permit.

### *Pyrocatechin.*

A.

| | | |
|---|---|---|
| Water | 300 c.c. | 10 oz. |
| Sod. Sulph. cyst. | 75 grammes | 2½ oz. |

Dissolve, filter, and then add:

| | | |
|---|---|---|
| Pyrocatechin | 15 grammes | ½ oz. |

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Pot. Car. | 125 grammes | 4 oz. |

Use 1 part A, 4 parts B, and 5 parts water. Potassium bromide will be needed only in case of over-exposure. This formula is recommended for density, but not for anything else.

*Hydroquinone.*

A.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Sod. Sulph. cryst. | 60 grammes | 2 oz. |
| Dissolve, filter, and then add: | | |
| Hydroquinone | 8 grammes | ¼ oz. |

B.

| | | |
|---|---|---|
| Water | 500 c.c. | 16 oz. |
| Pot. Carb. | 45 grammes | 1½ oz. |

For use take equal parts of A and B and water. This formula is given for persons who wish to use hydroquinone; but in the experience of the writer hydroquinone is not a suitable developer for Lovell plates.

*Glycin.*

A.

| | | |
|---|---|---|
| Water, hot | 160 c c. | 5 oz. |
| Sod. Sulph, cryst. | 20 grammes | ⅔ oz |
| Sod. Carb. cryst. | 4 grammes | 30 grains |
| Glycin | 8 grammes | 60 grains |

B.

| | | |
|---|---|---|
| Water | 320 c.c. | 10 oz. |
| Pot. Carb. | 40 grammes | 1⅓ oz. |

Develop normal exposures, or plates slightly under-exposed, with 1 part A, 2 parts B, and 10 parts water. This produces a soft, fine-grained, grayish negative, which prints better than it looks—the best of the soft-working developers. When strongly retarded with potassium bromide, glycin gives the results of a hard-working developer.

*Rodinal.*

| | | |
|---|---|---|
| Water | 200 c.c. | 4 oz. |
| Rodinal | 8 c.c | 1 drachm |

These are mixed in the graduate as needed. This is the most convenient of all developers, but gives thin negatives, and is fatal with over-exposure. It is excellent with under-exposure.

*Eikonogen.*

| | | |
|---|---|---|
| Water, hot | 500 c.c. | 16 oz. |
| Sod. Sulph. cryst. | 60 grammes | 2 oz |
| Pot. Carb. | 25 grammes | 1 oz. |
| Eikonogen | 20 grammes | ½ oz. |
| Pot. Bromide | 2 grammes | 25 grains |

This single solution is ready for use, and will keep long enough. Eikonogen is not recommended for Lovell plates, however.

## PLATINOTYPE DEFECTS AND THEIR REMEDY.

PLATINOTYPE paper, says a writer in *Photography*, is less subject to the many inherent faults which characterize silver paper, but at the same time is exceedingly sensitive to numerous things it has to encounter in the work-rooms of many photographers. These consist principally of untidiness and dirt. Prints are sometimes spotted and badly stained without any apparent cause, though the printer will insist that he had obeyed all the laws of cleanliness, and was unusually careful in this particular case.

Let us take a print that is covered with brownish-black stains, black comets, white comets, granulation, etc., and see if it be not possible to find their remedies.

*Black comets and stains* may be attributed to—first, negatives intensified with mercury and improperly washed; second, metallic silver on the negative film; third, retouching lead-pencil dust; fourth, retouching fluid; fifth, particles on the negative from other printing papers. On damp printing days the negative film absorbs moisture, and the trouble is generally emphasized.

To remedy these, the negative should be washed thoroughly after development. Imperfect washing at this time induces, when the plate is in the hypo bath, a deposit of metallic silver in or on the film, which is not easily removed by the subsequent washing, and, coming in contact with platinotype paper, *may* produce black comets Before printing, it is a good rule to rub the negative film with a wad of cotton, using considerable friction, to remove the (almost unseen) particles of matter clinging to it, and to take off the superfluous retouching varnish.

But the greatest enemy to platinotype is mercury. Since so many photographers have begun to make mercury-toned prints, complaints to the manufacturers of the paper on account of black stains, we are told, have much increased. The salt is a most dangerous thing to have about, from the printer's point of view. Someone who does not print or handle the paper at any

other time should attend to the developing, as when once the fingers have been in contact with the mercury, especially if they be not well washed with soap and water afterward, there is a risk that everything that is subsequently touched will be stained.

Negatives that have been intensified with mercury should be well washed, and when dry, varnished all over to the very corners; otherwise, comets and brownish-black stains on the prints may be expected.

Those who desire to use mercury should employ dishes that are used for no other purpose. They should operate in a room where the paper for black tones is not used.

Whenever mercury is used the fingers must be well washed with plenty of water and soap, and a special towel kept for drying the hands.

*White comets* come principally from two causes—dust of calcium chloride from the lump in the tube, when carelessly handled, and specks of lime that may fall from the ceiling upon the paper during the cutting up of the paper, or the filling of the frames. They may also be caused by negatives that have been improperly washed after fixation. It frequently happens that hypo will form on the surface of the imperfectly washed negative film in a day; sometimes it takes a month before showing itself. Negatives, therefore, should always be examined, and never printed from, unless thoroughly rubbed with a rag or wad of cotton. It is much better, of course, to be sure that the hypo is got rid of.

The developer should be used at its full strength, and kept at a temperature during the winter months not lower than 70° F. The development must be prolonged and full, and negatives need not be excessively dense. Should wavy markings occur on the prints, it is likely that the developer is both weak and cold, or the development has been too hurriedly done, or that the surface of the developer was covered with scum. The developer should not be allowed to remain in the open dish for any length of time, as dust collects on the surface, and may cause spots on the prints. It is better to return it to the bottle at once after development. Keep the developer stirred up after each print, and from it put off any precipitate that may form.

On damp days redry the negatives at a gentle heat, see that the backing pads are dry, and be certain that the paper when taken out of the tube is not exposed too long to the moist atmosphere. Prints made on hot, damp days should not be left too long before development. Lastly, be cleanly in every department — printing-room, benches, floor, printing-frames, developing dishes, and about one's own self.

## FIXING PLATINOTYPES.

In the last issue of Eder's *Jahrbuch* Dr. Jacoby, of Berlin, the inventor of Jacoby's platinum paper, has an interesting article on the fixing of platinum prints, from a translation of which in the *British Journal* we cull the following extract.

Dr. Jacoby points out that many old platinotype prints show a more or less yellowish tinge in the high lights, and that this is particularly noticeable on rough-surface papers, and that while this slight yellowness may not be by any means a disadvantage from an artistic point of view, yet as great stress is generally laid upon purity of the whites, it is as well to prevent this discoloration as far as one can.

The yellowing is frequently ascribed to a gradual decomposition of the "bluing" of the raw paper by the action of the light; it is principally, however, caused by traces of platinum salts. In making this statement we think that Dr. Jacoby has overlooked the fact that "bluing" of the raw paper has been abandoned for some time, at least in England. That all ultramarine blue papers will gradually yellow in time, particularly when treated with hydrochloric acid, is a factor which has long been known both in photograpic circles and in the paper trade.

Dr. Jacoby also points out that this yellowing has been ascribed to traces of basic iron salts, a theory which we believe was advanced with some considerable weight by Mr. Chapman Jones, and partly disproved, or combated at least, on experimental grounds by Mr. A. Haddon, who showed that the traces of iron were discoverable

even in the raw paper without the application of any platinotype sensitizing solutions. As rather supporting the argument that traces of iron are not always the cause, and that platinum may be, Jacoby states that when two pieces of paper are coated, the one with the normal lead-iron sensitizer for the cold-bath process, and the other with plain chloro-platinite of potash solution, the former can be fixed out absolutely clear with a hydrochloric bath, whilst the latter shows a distinct yellow tinge, though both may have been carefully kept in a calcium box, and that, moreover, the latter, that prepared without an iron salt, will after some months be a deep brownish yellow.

In connection with this we would point out that some of the platinum salts have an extremely strong coagulating action on gelatine, and that this action may have to be considered in connection with the sizing of the raw paper. Though against this view Jacoby states that he has noticed the yellowing to be independent of the preliminary sizing of the paper, and ascribes it to the action of damp upon the extremely attenuated film of platinum salt—a view which is also supported by the well-known fact, which has been lately confirmed by some researches upon the stability of gold and platinum solutions of various concentrations, in which it was shown that the more dilute the solution the more rapidly was the noble metal reduced to the metallic state.

However, laying on one side these purely theoretical considerations, Dr. Jacoby comes to a conclusion with which no one will quarrel, and that is, that the present method of fixing platinotypes is unsatisfactory, and that while it is possible to obtain pure whites it is not advantageous to use those means which will give them, such as strong hydrochloric baths, nitrites, chloride of lime, etc., because these attack the sizing of the paper itself.

Jacoby had already pointed out ( Eder's *Jahrbuch*, 1897 ) that platinotypes were cleaner in the whites when, after the usual hydrochloric bath, they were treated subsequently with the alkalies of the fatty acids, such as the oxalates, citrates, etc. Of the salts tried, the citrate and oxalate of ammonium proved to be the most satisfactory, and the latter was adopted because it was cheaper than the citrate; but as ammonium oxalate is in itself a faint developer, it is advisable to fix the platinotype print, as usual, with two normal hydrochloric baths, and then to treat it with a 5 per cent. solution of ammonium oxalate for a quarter of an hour. For the ammonium oxalate solution it is essential to use distilled water, as when hard water is used a copious precipitate of calcium oxalate is formed.

By this treatment finer whites are obtained than by the ordinary method, but even with this, says Dr. Jacoby, it is impossible to remove all traces of platinum salts, and there is no known perfect fixing agent.

## SNOW PHOTOGRAPHY BY NIGHT.

Two years ago I was compelled to spend a part of the winter at a fairly high altitude in the Swiss Alps. It was business, not pleasure, which held me there, and I had little time for photography until it occurred to me to experiment with night work. What I commenced more from curiosity than from any expectation of doing good work soon became very successful. The December sun was so low that near valleys never received any direct rays, but lay in perennial shadow, mere stretches of gray snow, fit to break the heart of anyone but a very experienced worker. But at night, with a full moon high in the sky, foreground and middle distance were lighted, and by judicious selection some fine compositions were possible. It has been said that the relative strengths of sunlight and moonlight are as 500,000 to 1, and from this rough basis I calculated my exposure. Using *f*/16, I would have given 1/25-second exposure in sunlight, and a simple calculation gives six hours as the necessary moonlight exposure. I tried this, but my negative was hopelessly overexposed, and after several experiments I found that rather less than one hour was sufficient. I believe the relative strengths of light quoted are authoritative, but there must be some mistake somewhere, and for photographic purposes a ratio of 80,000 to 1 will prove ample. The tem-

perature used to sink to 15° or 20° below zero (Fahr.), but I did not find that this had any effect on the sensitiveness of the plate or on the lens. I believe that in a temperature of 40° or 50° below zero the balsam cement in a lens is filled with minute cracks.

I used *f*/16 and a fairly slow plate, because time did not matter, and I was rather hankering after exhibition honors, and so worked with one eye to enlargement. But there is no reason why such a step should be adhered to. With *f*/8 and an extremely rapid plate I got a good result in six minutes. But there was a sharpness defining the edges of shadows which was absent in the longer exposures, and I inclined to think that the latter were more suited for my special pictorial purpose. Focusing must be by scale. I had my camera marked for "infinity," with an *f*/16 stop.

The old question of steaming of lenses by taking them from a cold to a warm temperature spoilt one negative. I took the camera indoors a moment, and the lens got finely steamed. Then when I went into the open again the steam *froze*, and I did not find it out.

Moonlight photography is not a mere curiosity—it is practical. Of course, sunlight is better—if it can be had; but moonlight has given me pictures which look as though brilliantly sunlit. For people wintering in high altitudes, or in the far north, it is a useful possibility.—E. J.

## NOTES ON CHILD PORTRAITURE.

BY JOHN A. TENNANT.

In the treatment of a single childish figure we have an infinite variety of effects from which to choose. Simplicity will most often be the keynote to success, whether we photograph the child alone or with an accessory of some sort. Among a number of prints received from Japan were several studies of a child arranging flowers and sprays of budding plants in vases. The combination impressed me as a peculiarly happy one, and its mention suggests a line of work wherein many novel and interesting effects may be obtained. The draperies need careful attention in pictures of this sort. Our endeavor should be to avoid stiffness in arrangement, and to reproduce something of texture and detail, instead of the harsh and confused mass of clothing often observed in children's pictures. This, of course, is largely a matter of illumination, exposure, and development.

The difficulty of shyness or reserve is more often encountered with single children than in photographing groups. This we can generally overcome by taking the child into our confidence, and explaining the camera as we get it ready, avoiding absolutely any remarks calculated to alarm the little one. I have had the best results when I had the camera set up and focused on a particular spot, asking the child, perhaps, to show me its eyes wide open for a moment while I secured the proper sharpness, and then allowing it to wander away at will. By noting the surroundings properly, the operator may avoid the necessity for any further use of the ground-glass, putting in his plate, setting the shutter, and, with bulb in hand, awaiting the happy moment of the child's return. A chain, a railing, a curtain, the open window, a door ajar, the end of the piano, a rug on the floor—all these may serve as locating points for the little boy or girl to be pictured and help us to get them on the plate.

Generally, the chief annoyance the ambitious worker will have results from the well-intended efforts of the friends and relatives of the child to help. A charming disorder of apparel is seen; but the child is promptly taken off and hastily attired in its best bib and tucker, meanwhile being often pulled into stiffness and ill-humor. Then, when shining with the face-rubbing, stiff in its unaccustomed finery, the little one comes to the camera, the friends come, too, and it is "Now, Edith, look pleasant; *do* hold your head up!"—"*Don't* stick your fingers in your mouth," and so on, *ad nauseam*, until the poor child is utterly impossible. Under such conditions I have

found a little guile very useful: Let the well-meaning relatives or friends stiffen up the subject to the last notch of woodenness, and then go through the motions of an exposure, all but exposing the plate. Then, explaining that you merely want to try an experiment, drive out the friends, get the child soothed into naturalness, wait until all memory of the ordeal has passed, and take your own chance with the plate! As to clothing, there can be no question that the best is that in which the child will be most comfortable. The simpler it is, the better; it is the child you are picturing, not the dress.

It is always better, provided the worker is properly acquainted with the child, to have not more than one other person about. Nothing so detracts from naturalness, or so tends toward the usual studioishness of the gallery portrait, as a number of assistants. Get rid of them, all but one sympathetic helper who can be depended upon to do only what you say, and your chances of success are far better. A child is easily confused, and does not yield so well to the camera's needs when several people claim attention.

Very young babies are hard to manage, unless in the mother's arms. The spectacle of a plump child piled into a chair in which it is unable to sit alone may be pleasing to the parents, but there is no picture coming. The very little one is often most charming as the mother holds it, and with proper care results that are pleasing may be had. Unconventional pictures may be made by preparing for the work in a very bright light, the camera resting on a stool or large book, focused on a selected spot, wherein the child is induced to creep. Many dwelling-houses have large windows, so that when the curtains are fully put aside the light is strong enough to permit of exposures of one-half to one second; and while some plates will be wasted, some priceless negatives may be obtained. When the child is able to stand up to a chair the sympathetic and well-prepared worker has some fine chances, and pictures which show the bare feet of the little child are often most charming. The baby may be induced to play on a dark rug, placed in the proper light, and then it is a matter of patience and good judgment.

In photographing children with their toys two or three little points need close attention. It is better, for instance, to wait until the little ones are really interested and busied with their toys than to get them merely holding a toy and looking at the camera.

Sometimes a toy in the hands of a very young child is an obstacle to success, because the baby will put things to his mouth. Here, of course, the toy should be retained by the photographer or kept out of sight altogether. When and where and how to use toys in handling children are, in fact, questions which can only be carefully answered with a knowledge of the children and the circumstances. Occupation of some interesting sort, or a picture-book, may often be substituted for the toy with positive advantage. Perhaps the most charming of all the children's pictures I have seen is a group of children "playing school," made by Mr. Core. The group comprises five or six children of one family, and takes the form of a lateral triangle running lengthwise across a 5 x 7 plate. Four of the children, arranged in the order of their ages, are grouped closely together to form an oblique, irregular line, dividing the picture space from upper left- to lower right-hand corner. The way in which they nestle together to see a folio held in the hands of an elder child is very delightful. At the left hand the dark figure of an elder brother, busied with a design upon the miniature blackboard or wall-slate, adds force to the motif, and at the lower apex of the triangle sits the baby of the family, slightly separated from his fellows, independently occupied with a picture-book in proud imitation of his companions. Pictorially the little figure binds the composition together, and the arrangement of lines and tones gives one a continual feast of pleasure and interest. Numberless compositions along similar lines will suggest themselves, in which the small furniture so commonly used by children nowadays may be made to help in the picture-making.

---

At this time of the year a carefully prepared advertisement in the local papers should prove a profitable investment. See Mr. Marshall's article on another page.

# EDITOR'S TABLE.

THE C. P. GOERZ OPTICAL WORKS, 52 Union Square, New York, ask us to announce that they are now prepared to attach their new plate attachment to the No. 3 Folding Pocket Kodak, so that users of that instrument may use films or plates as may be desired. The attachment further offers the advantage of being able to focus the picture on the focusing screen. Full particulars may be had on application to the C. P. GOERZ OPTICAL WORKS.

---

MR JOHN CARBUTT, of Wayne Junction, Pa., favors us with two remarkably fine photographs of flowers, demonstrating in a most attractive way the orthochromatic value of his new Polychromatic plates. We shall have more to say of these presently, but meanwhile would advise our readers to send to Mr. CARBUTT for the descriptive circular concerning the new plate as an undoubted help in portraiture where colors are concerned.

---

THE San Francisco Salon of 1902 is announced in a prospectus recently received. This enterprise should have the support of all earnest Western professionals. Copies of the prospectus may be obtained from the Executive Committee of the San Francisco Photographic Salon for 1902, 819 Market St., San Francisco.

---

THE second Chicago Salon, just closed, was a most successful affair. Nearly a thousand pictures were submitted, out of which 192 were accepted and given place. The average of the work accepted was higher in quality than that of last year, and the "freakishness" evident in last year's exhibition was hardly noticeable. Mr. F. DUNDAS TODD has published a "Souvenir" (price 50 cents), in which some fifty of the best pictures shown are reproduced in a careful way. From this Souvenir our readers may obtain a very complete survey of the Salon and its work.

---

WE have received from Messrs. ROSS., Ltd., 111 New Bond St., London, a bulky catalogue of their photographic specialties, comprising the new Ross-Zeiss Anastigmats, Ross Symmetric Anastigmats, cameras, projection lanterns, and process-workers' apparatus. It is evident from this interesting illustrated catalogue, which may be obtained on request from Messrs. ROSS, Ltd., that this old established firm is as progressive as ever in meeting the photographer's requirements and desires.

---

WHAT should prove of great value to photographers in New York and vicinity is the Photographic Library of HENRY KAHN & CO., 189 Broadway. All the standard works on photography are on file, and subscribers can have the use of any book for a period not exceeding seven days. Every photographer has often felt the need of a ready reference library, and this enterprise of HENRY KAHN & CO. will fill a long-felt want. For the photographer who wishes to look up a formula, reading accommodations are to be found right in the store. A nominal fee of $1 a year is charged. New books of value will be added from time to time, and we advise our Eastern readers to send to HENRY KAHN & CO. for their Library Pamphlet.

---

*How to Develop Lovell Plates.*—A copy of this valuable little book comes to our table from the LOVELL DRY PLATE MANUFACTURING CO., of New Rochelle, N. Y. It is from the pen of Mr. F. A. WAUGH, and gives a clear and practical account of the methods best adapted for the successful working of Lovell plates, with a valuable chapter of tested formulæ. In its arrangement and information this booklet is a model for all manufacturers of dry plates. It adds to our knowledge of the specialties of which it speaks; it tells the story in a direct and personal way, which convinces; and it will undoubtedly serve as a business bringer for the enterprising company responsible for its appearance. We recommend our readers to secure a copy before the edition is exhausted. It is published for free distribution, and may be obtained by sending a postal card to the LOVELL DRY PLATE MANUFACTURING CO., addressed as above.

---

THROUGH a clerical error the portrait of a Spanish lady which was recently published in the advertisement of the BAUSCH & LOMB OPTICAL CO. in this journal was credited to TORRES & CO., Mexico City, Mexico. This portrait was in reality made by ARRIAGA & CO., of Mexico City. The picture was, however, made with Plastigmat, *f*/6.8, both these firms being supplied with these lenses.

---

*Reorganization.*—The following item appeared in the New York *Times* of October 25th:

TRENTON, N. J., Oct. 24. The Eastman Kodak Company, with an authorized capital of $35,000,000, was incorporated here to-night to manufacture and deal in kodaks and photographic supplies. Of the capital stock $10,000,000 is to be preferred, with 6 per cent. cumulative dividends.

The company is understood to have been formed for the purpose of consolidating the leading photographic camera and supply concerns of this country and England.

Trade- Mark.

**Actien-Gesellschaft für Anilin-Fabrikation, Berlin S.O.**

Photographic Department.

Manufacturers of the **patented**

# Agfa-Intensifier.

**Name protected.**

## *The One Solution Intensifier.*

**Agfa-Intensifier is a clear, colorless solution, which for use is diluted 1 part with 9 parts of water. In this the negative to be intensified is immersed, and intensification commences immediately, continuing for about 10—15 minutes, when the process is complete and the plate must be withdrawn to avoid veiling.**

**Agfa-Intensifier does not stain, and the whole process is absolutely complete in the one manipulation; it only remains to wash the negative.** Of all Dealers.

| 4 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $ —,60 | 1,— | 1.75 |

**TESTIMONIALS.**

**Mr. Jacob Schloss, New York,** writes: Gentlemen: I have tried your **"Agfa" Strengthener** and find it works splendidly, far better than the old time Mercury and Ammonia or Soda, and shall continue it.

**Mr. F. W. Guerin, St. Louis, Mo.,** writes as follows: Gentlemen: Replying to yours of 12th inst., the **Intensifier** is all right. I had been using the intensifier some time before you sent me that sample.

# Agfa-Reducer.

**Name protected. Patented.**

**"A novel and simple process of Reduction for Plates, Slides, or Bromide Papers."**

**"Always ready for use, and instantly prepared."**

**Only to be dissolved in 10 parts of water.**

**Complete reduction takes about five minutes.**

Of all Dealers.

$0.80 per original bottle of 4 oz. with **screw lid and hollow glass stopper, serving as measure.**

$1.00 per box of ten glass tubes containing ten grammes each.

Eikonogen. ✱ Amidol.

Rodinal. ✱ Diogen.

IMOGEN.

1889

1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

**Manufacturers of**

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

INDEX TO THE VOLUME—IN THIS NUMBER.

HARVARD COLLEGE LIBRARY

PRICE, 30 CENTS.
Vol. XXXVIII. No. 540.
DECEMBER, 1901.

FA 6615.545

# WILSON'S PHOTOGRAPHIC MAGAZINE

## DEVOTED TO PHOTOGRAPHY. MONTHLY: ILLUSTRATED.

GREETING . . . . . 457
THE PRESENT POSITION OF PROFESSIONAL PHOTOGRAPHY IN ENGLAND . 459
VISIBLE DEFECTS IN LENSES By H. Fenner . . . . . 461
DEPTH OF FOCUS AND OTHER MATTERS. By T. Perkins . . . . . 462
"MY FRIEND STRAUSS" . . . . . 458
THE OKLAHOMA CONVENTION . . . . . 464
DOES PUSH PAY? By Paul Clare . . . . . 466
EQUALIZING ILLUMINATION OF DARK AND LIGHT OBJECTS. By A. T Newton 467
HELPING FAULTY NEGATIVES. By John A. Tennant . . . . . 469
CHIPS FROM A PHOTOGRAPHER'S WORK-ROOMS . . . . . 471
THE BIOGRAPH AS A RECORDER OF CURRENT EVENTS . . . . . 473
MINIATURES. By Carine Cadby . . . . . 474
A CRUCIAL TEST OF A BACKED PLATE . . . . . 475
THE EVENING SUN, MR. BERNARD SHAW, Etc. . . . . 476
F. DUNDAS TODD . . . . . 477
THREE PORTRAITS BY SPELLMAN . . . . . 479
A PRACTICAL NOTE ON THE PLACING OF THE FIGURE. By Rev. F. C. Lambert 480
PROFESSIONAL PHOTOGRAPHY AT THE LONDON EXHIBITION . . . . . 482
THE PHOTOGRAPHER AND HIS CUSTOMER. By Barrister . . . . . 484
APPLICATION OF PHOTOGRAPHY TO LEGAL RECORDS. By Henry Leffmann 485
GENRE PICTURES. By Robert Melville . . . . . 486

OUR PICTURES:

"Portrait of a Child." By Philip S. Ryder, Syracuse, N. Y.
Eight Engraved Supplements from Photographs by I. de Vos, Chicago; D. D. Spellman, Detroit; R. Newell & Sons, Philadelphia; Dan. L. Johnson, Oshkosh, and The American Mutoscope Co., New York.

EDWARD L. WILSON,
287 FOURTH AVE: NEW YORK.

ENTERED AT N. Y POST OFFICE AS SECOND CLASS MATTER.

A MOST ACCEPTABLE HOLIDAY GIFT
USEFUL ALL THE YEAR AROUND

*Fifth thousand now selling*

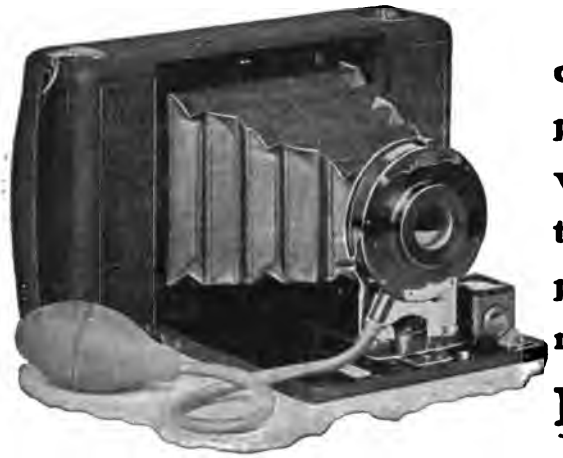
# WILSON'S CYCLOPAEDIC PHOTOGRAPHY

The Most Complete Reference Book of Photography in the Language. A Concise Handbook of the Terms, Formulae, Materials, Methods, Processes and Applications of Photography as Practiced from its Inception to the Present Day. Four Hundred and Fifty Closely Printed Pages, with over Two Thousand Five Hundred References. Answering every Question for the Amateur or Professional Worker. Arranged in Alphabetical form for Ready Reference and forming a Complete Photographic Library in One Convenient Volume. Illustrated and Strongly Bound.

**PRICE $4.00. POSTPAID**

***Order through your dealer, or get it direct from the publisher's agents***

**TENNANT & WARD,** 287 Fourth Ave., NEW YORK



**The only pocket camera having a pneumatic release, variable speed shutter with iris diaphragm stops is the new**

## No. 3 Folding

# WENO HAWK-EYE

**FOR 3¼ x 4¼ PICTURES.**

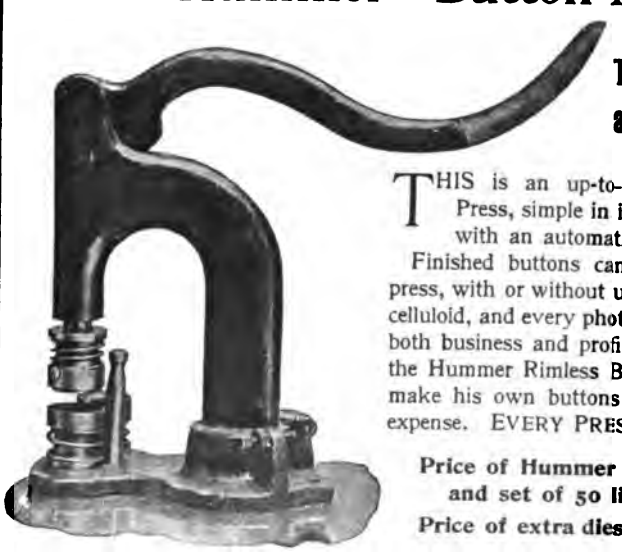
Fitted with the finest rapid rectilinear lenses, brilliant reversible finder, focusing mechanism and tripod socket. It is a complete daylight loading film camera of the highest type in pocket form.

**Price, with Rapid Rectilinear lens, . . . . . $15.00**
**Price, with single Achromatic lens (set focus), . 13.50**

**BLAIR CAMERA CO., Rochester, N. Y.**

*Hawk-Eye catalog free by mail.* *Formerly of Boston.*

# The "Hummer" Button Machine



**The Profit is Large, and the Labor Light.**

THIS is an up-to-date Rimless Button Press, simple in its action and equipped with an automatic die shifter.

Finished buttons can be made with this press, with or without uniting the print to the celluloid, and every photographer can increase both business and profits by owning one of the Hummer Rimless Button Machines, thus make his own buttons and save delay and expense. EVERY PRESS IS GUARANTEED.

**Price of Hummer Machine and set of 50 lign dies, $20.00**
**Price of extra dies, per set, $10.00**

(PATENT APPLIED FOR) MANUFACTURED BY

**H. A. HYATT - - ST. LOUIS, MO.**

# Photographic Goods 1878-1901

**Eagle** PORTRAIT, VIEW, RECTILINEAR & COPYING **Lenses**

**Seed Dry Plates** FILMS AND DEVELOPERS

Products of Anilin Co., Berlin--Importer

Berlin Pyrogallic Acid--Sole Importer

OZOTYPE MATERIALS--American Agent

ROYAL BLOTTERS--American Agent

COLLINS CARD STOCK--All Lines

Eagle Portrait Cameras

EAGLE GALLERY STANDS

SEND FOR CATALOGUE

George Murphy Wm. H. Murphy

57 EAST NINTH STREET

NEW YORK

# THE ROYLE ROUTERS

**have earned and maintained an unparallelled reputation for general excellence. They have real merit, and have proved it**

## JOHN ROYLE & SONS

**PATERSON, N. J.**

## TENNANT & WARD

**Special Agents for Wilson's Photographic Books**
**289 Fourth Avenue, New York**

The Standard Text-book on Process Work, giving complete instructions and formulæ in plain words. Illustrated by choice examples of the principal methods of reproduction.

PHOTO-ENGRAVING IN LINE and HALF-TONE; PHOTO-GRAVURE; COLLOTYPE; HELIOTYPE THE SWELLED GELATINE PROCESS, AND PHOTO-LITHOGRAPHY IN LINE and HALF-TONE

By W. T. WILKINSON

Revised and Enlarged by EDWARD L. WILSON

**CONTENTS:**

**Photo-Engraving in Line.**
I. Appliances for Making Photographic Negatives.
II. The Wet Collodion Process.
III. Photographic Manipulations.
IV. Apparatus for Printing Upon Zinc.
V. Printing on Zinc in Albumen.
VI. Printing on Zinc in Bitumen.
VII. Direct Transfers to Zinc.
VIII. Etching Line Transfers.

**Photo-Engraving in Half-tone.**
I. Retrospective.
II. Making Grained Negative.
III. Etching in Half-tone.
IV. Printing from the Block.
V. The Transfer of the Drawing and its Treatment Before Etching.
VI. Hints from all Sources.

**Photo-Engraving on Copper.**
I. Subjects in Line.
II. Half-tone Intaglios.
III. Half-tone Intaglios—*Continued.*
IV. Half-tone Intaglios. Electro-Method.

**Photo-Lithography in Line.**
I. Photo-Lithography in Line.
II. Paper Transfers.
III. Paper Transfers—*Continued.*
IV. Toovey's Negative Transfer Process.
V. To Develop Photo-litho. Transfers.

**Photo-Lithography in Half-tone.**
I. Photo-Lithography in Half-tone.
II. Ink Photos.
III. Husband's Papyrotint Process.

**Collographic Printing.**
I. Half-tone Photographic Negative.
II. The Heliotype Process.
III. The Collotype Process.
IV. Printing from the Collotype Plate.
V. The New Home Printing Process.

**180 PAGES**
**ILLUSTRATED WITH INDEX**
**PRICE, $3.00, POST-PAID TO ANY ADDRESS**

## TENNANT & WARD

**Special Agents for Wilson's Photographic Books**
**289 Fourth Avenue, New York**

# The Sale of Euryscope Lenses

MADE BY THE ORIGINAL FIRM OF

VOIGTLÄNDER & SON, IN Braunschweig, Germany,

CONTINUES UNABATED.

The leading artists use them.

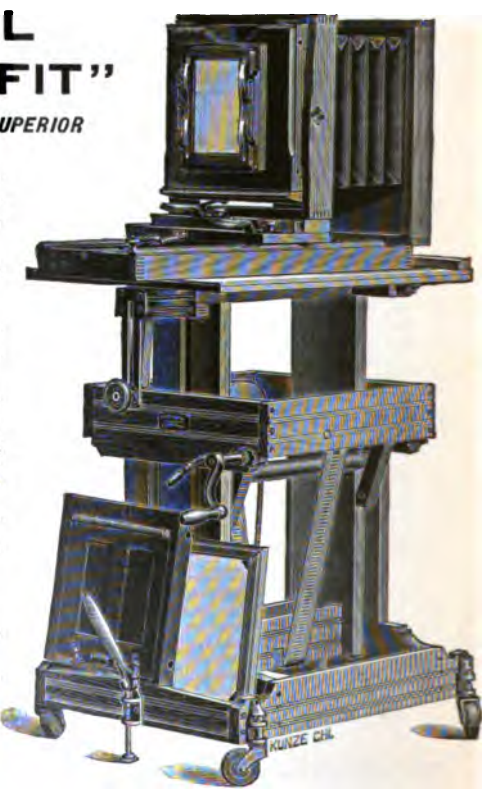
Send for particulars to the Sole American Agents,

BENJ. FRENCH & CO.,

BOSTON, MASS.

# THE "MODEL PORTRAIT OUTFIT"

***PERFECT IN COMPLETENESS. HAS NO SUPERIOR***




Camera is **Solid Mahogany,** finely finished. Equipped with double lever actuated swing, focus lever, **reversible cabinet attachment** (as shown), 5x7, with one double plate-holder of the latest pattern, with rubber slides and kits, 4¼x6½, 3¼x4¼.

A **Reversible Curtain Slide-Holder** and kits, 6½x8½, goes with each camera.

For convenience, economy, and general portrait work money can buy no better.

The Stand (our No. 2 Magic) can be raised or lowered quickly. The weight of camera is **balanced by springs** (not weights). **A child can operate it.**

One 8x10 Bonanza Curtain Slide-Holder and one 5x7 Double Plate-Holder goes with each outfit.

**PRICE.**

| | |
|---|---|
| Outfit complete as above (8x10 only size) . . . . . | $37.00 |
| Extra Double Plate-Holders, 5x7, each . . . . . | 1.25 |

**JAS. H. SMITH & CO.**

**311 Wabash Ave., Chicago.**

# Collins Mounts for Holiday Trade

CHRISTMAS TRADE always demands specially fine mounts. You will miss a great opportunity if you fail to show them. An attractive display of samples now will secure orders for fine **Collins Mounts** from customers who at other times would take only the most ordinary styles.

Our "**Lorenzo**" is one of the most attractive mounts for Christmas trade. Its clear-cut embossed border of oak-leaves stands out like a cameo. Oval portraits on "Lorenzo" mounts will bring in many extra orders with extra dollars in the holiday season.

Collins mounts are sold by dealers everywhere

**A. M. COLLINS MANUFACTURING CO.**
**527 Arch Street, Philadelphia**

# PHILLIPS & JACOBS,

**JAS. F. MAGEE & CO.**

## 622 Race Street,

**PHILADELPHIA.**

***Manufacturers of***

**Magee's Nitrate of Silver C. P.**

**cryst. Pure Chloride of Gold**

***and other Photographic Chemicals.***

Particular attention to the Refining and Recovery of Gold and Silver from Photographers' wastes, and the residues from silverers, gilders, jewelers, bookbinders, etc.

***PROMPT AND ACCURATE RETURNS.***

# Do you ever

get the high lights in your Bromide or Gas Light Printing Papers *veiled* or *clouded over* (from over-exposure or over-development)? You can save the prints and make them very fine by using our "**Oxpo**" **Reducer.** It also reduces plates. *Never stains.*

**Pint, 80c.; 8 oz., 50c.; 4 oz., 30c.**

## Ninety-nine per cent.

of the amateur's first negatives are under-exposed. *You cannot under-expose* if you use our

## GRAY DAY DEVELOPER

**2 Solution (much concentrated), 8 oz., 35c.**

If your dealer will not supply you we will ship these products prepaid on receipt of price.

## New York Photographic Co.

**159 West 80th St.. New York City**

# Pictures Mounted with HIGGINS' PHOTO MOUNTER

Have an excellence peculiarly their own. The best results are only produced by the best methods and means—the best results in Photograph, Poster and other mounting can only be attained by using the best mounting paste—

**HIGGINS' PHOTO MOUNTER**
(Excellent novel brush with each jar).

**At Dealers in Photo Supplies, Artists' Materials and Stationery.**

A 8-oz. jar prepaid by mail for 30c., or circulars free, from

**CHAS. M. HIGGINS & CO., MFRS.**
NEW YORK, CHICAGO, LONDON.
Main Office. 271 Ninth Street, } Brooklyn, N. Y.,
Factory, 240-244 Eighth Street, } U. S. A.

# PLATINA-BROMIDE Vinco

**King of Developing Papers.**

•

**MADE IN SIX GRADES**

**Carbon Matt, Rough Matt and Glossy, Slow Contact.**

**Special Rapid Smooth for Portraits and Enlarging.**

**Special Rapid Carbon Matt for Portraits and Enlarging.**

**Special Rapid Rough Bromide for Enlarging.**

# CARBUTT'S

**Dry Plates....**
**Celluloid Films**

**CUT SIZES**

•

**ECLIPSE for Portraits and Snapshots.**
**Orochromatic for Color Values.**
**Non-Halation Double-Coated.**
**B 16-20 for Copying, Views and Architecture.**

•

**Single Coated Plates with Columbian backing (introduced in 1893), at advance of 10 per cent. on list price, produces a perfect non-Halation Plate.**

***LANTERN TRANSPARENCY PLATES***
**UNEXCELLED.**

**CARBUTT'S Metol-Hydro Developing Powder**
**A UNIVERSAL DEVELOPER.**

**The above obtainable of all dealers.**

Sample dozen 4 x 5 or Cabinet size, with a VINCO print and sample of our Metol-Hydro Powder, mailed to any address upon receipt of 25c. We are sure you will be pleased with VINCO. Order of your dealer, and if he cannot supply you we will. Price-list mailed at request. Orders for Vinco sent by mail or express prepaid on receipt of list price. Exposure Meter sent free on application.

**JOHN CARBUTT, Manufacturer,**
**KEYSTONE DRY PLATE WORKS. Wayne Junction, Philadelphia, Pa.**

# WHAT OTHERS HAVE DONE YOU CAN DO!

## THE HOME ART SCHOOL AND BUREAU OF ART CRITICISM

WE are teaching by mail all over the country, at little cost and with perfect success, Art Principles in Photography, Composition, Oil and Water Color Painting, Free-hand Drawing, Pen Drawing for Illustrating and Lantern Slide Painting. **COLOR IS THE COMING MEDIUM.** The up-to-date man should at least learn Slide and Miniature Coloring. Complete Course only $10 Single photos, paintings or drawings criticised for 25 cts. Six at once with full lesson, $1. Always send return postage. Begin now. **Both Fame and Money in Good Art.**

**A. G. MARSHALL, 625 Vanderbilt Ave., Brooklyn, N. Y.**

**June 1 to Oct. 1, Thousand Island Park, N. Y.**

# CRAMER'S ISOCHROMATIC PLATES

are the most perfect color-sensitive plates in the market. Made in .... three grades of speed ....

## SLOW, MEDIUM *and* INSTANTANEOUS

For Sale by all Dealers in ...Photographic Supplies...

MANUFACTURED BY

## G. Cramer Dry Plate Co.

ST. LOUIS, MO.

OFFICES IN

New York
32 East 10th Street

Chicago
Room 705, Cable Bldg.

San Francisco, Room 38, 819 Market St.

•

*Use Mallinckrodt's Sodium Sulphite Anhydrous Absolutely Pure for Photographic Purposes*

ORIGINAL RELIABLE

# WALPOLE PEA CRYSTAL

WALPOLE
HYPO

## WALPOLE CHEMICAL CO.

WALPOLE, MASS.

---

# *The* ALBERTYPE COMPANY

**VIEWS made into SOUVENIRS**

## Photo-Gelatine Printers

250 ADAMS STREET
BROOKLYN, N. Y.

FIVE OUT OF ELEVEN CAMERAS SUPPLIED
THE BALDWIN POLAR EXPEDITION WERE

## REFLEX CAMERAS

They show the picture right size, right side up, and **focus to the moment of exposure.** Reflex Focal Plane Shutter supplied,—fastest in the world. Our book is of real interest. Sent free.

REFLEX CAMERA COMPANY - - - - YONKERS, N. Y.

PORTRAIT OF A CHILD
By P. S. Ryder, Syracuse, N. Y.

# WILSON'S PHOTOGRAPHIC MAGAZINE.

[illegible]

VOL. XXXVIII. [illegible] No. [illegible]

## GREETINGS.

[illegible]

# WILSON'S PHOTOGRAPHIC MAGAZINE.

*EDITED BY EDWARD L. WILSON.*

VOL. XXXVIII. DECEMBER, 1901. No. 540.

## GREETING!

HEALTH and greeting, with all good wishes to our readers and co-workers wherever this word may find them!

The years go by most gloriously, and our beloved photography grows more useful to the world, and more interesting to us all with the passing years. Only those who have watched and helped in its growth through many years, as we have, can fully grasp its meaning to-day, or love it as intensely as we do.

On the 1st of January, 1902, this MAGAZINE will celebrate its thirty-ninth anniversary. We want everyone of our readers and subscribers to help us celebrate the event. The thirty-eight years we have spent in the service of American photographers, as editor of this MAGAZINE, form a record unique in photographic journalism. We have done our best, and are proud of the record. But now—after all the work and strain of the years—comes the natural desire for friendly greeting from those we serve, and the prompt renewal of subscriptions to the MAGAZINE, which means "well done."

There is an old proverb which says that "good wine improves with age." We hope and believe that our MAGAZINE has also improved under the same gentle influence. It is written elsewhere that "no man having drunk old wine straightway desireth new, for he saith, *the old is better.*" (Luke v., 39.) The moral is obvious. We want the support of all our old subscribers, because they have drunk of the old wine, and know full well that a photographic magazine, with age and experience behind it, is better than others lacking this experience. A comparison of this thirty-eighth volume of "WILSON'S" with what other journals offer will bring us your support in this.

Let us have a grand mail rally of old subscribers, every one sending the cheering word and $3 for 1902, which we feel we have deserved.

But there are others with whom age is not in favor. So be it. Youth is strenuous and wants the new. To them this MAGAZINE makes its claim by a display of energy and vitality equal to that shown by the youngest of our contemporaries. Look through its pages from January to December, and see everywhere the spirit of to-day. In no other photographic journal can you find so much current information concerning the issues of the present—wholly directed to the practical helping of those who face the conditions of to-day. In no other photographic journal can you find so many examples of the best photography of to-day. Here, again, comparison will bring us the support of the younger workers who want the best for their advancement.

We are thirty-eight years young, and the years have given us new enthusiasm and new power and new desire. We want to be more useful, more helpful to more readers. You can help us in this. Send us your subscription for 1902, so that it will reach us before January 1st. It is an investment of good will and capital which will return to you a hundredfold.

Again, with fraternal greeting, yours,

EDWARD L. WILSON.

## "MY FRIEND STRAUSS."

### With Some Particulars About Lytrit Portraits.

UNDER the above heading William Marion Reedy, of the St. Louis *Mirror*, writes in his characteristically lytrit way, as follows:

"One hundred dollars per dozen for photographs strikes one as rather sumptuous, doesn't it? But if they're worth it, what's the odds? One would think that such prices would prevail only in the studios frequented by Gotham's Four Hundred, but that is not the case. These photographs are put forth in St. Louis and by my friend Strauss, the best photographer in the world. They are more than photographs. They are not tainted with the mechanical. They are creations, works of art. They are pictures in the best and highest sense, and they are called Lytrit portraits. The photographers of the entire country are interested in the new departure, They are beginning to imitate it, but Strauss is inimitable in anything but the mere mechanical processes. The making of a lytrit portrait, that is the securing of the negative, will take from two to three hours. Strauss himself poses the subjects, and the posing is done with just that regard for perfect effect that moves the painter of a portrait. When the photograph is taken it is transferred to the lytrit paper, and then it is worked into a pen and ink and delicate wash setting, which, when completed, gives one the beautiful, softly-strong effect you will find only in this work and in the very best etching. By a happy felicity of treatment the artist photographer gives to features, to arms, to hands, to hair, the effect of the most masterly modelling. The work has plasticity and vitality, and in those qualities is brought out the character of the person portrayed. The total effect of such a photograph—if it may be so called without some qualification—is that which makes the essential value of a portrait in oil. The work has the individuality of the sitter, plus the individuality of the artist. To the observer the pictures are so subtle in their blend of the light-writing of photographs and the freedom and finish and unconvenality of good drawing that they are a revelation to the world of photography. It isn't a trick at all. It is sheer art, and it stamps every picture as individual and different. It breaks away from all the trammels of photography pure and simple. It represents what photography is in the hands of a genius, in these days when there are myriads of successful mere manipulators of the camera. It permits of an arrangement of values in the pictures. It gives the most fascinating effects in drapery. It enables the production of portraits that seem to grow naturally out of dainty backgrounds. The pictures which my friend Strauss has on exhibition at his studio at the present time are worthy the study of everyone who has a feeling for art. The exhibition is, in itself, an event worthy of elaborate treatment by the press. It shows that we are doing things in St. Louis, things that count for beauty and high originality, things that make the city known of the children of light all the world over. Strauss' is a great St. Louis institution, and we are not as proud of it as we should be. We forget it sometimes when we show the stranger Shaw's Garden, Forest Park, Busch's Brewery, and Cupples Station; but we shouldn't. It is doing more for the generation of real art feeling in this city than all the schools. And Strauss has done another thing. He has succeeded in evolving in his art a typical St. Louis girl, just as Gibson has evolved the Eastern girl. Strauss' St. Louis girl is something more than the Gibson girl and the C. Allen Gilbert girl combined. The Strauss girl has a peculiar tone and carriage and a piquantly possessed, though a little demure, look that are indigenous to this community. She isn't statuesque and she isn't clinging. She has an esprit of her own that is the happy mean between the frosty and the saucy, between the voluptuous and prim, between the alert and the languorous. The lytrit portraits of St. Louis girls by Strauss are wholly elegant in their suggestion of freedom. As for his lytrit portraits of men, they are treatments of character that eliminate the suggestion of silliness there is in any ordinary pho-

tograph of a man. But my friend Strauss can only take about three of these portraits in a day, and can only finish one in about ten days, and so it seems that he must charge only $100 per dozen. Yet they pay it—his patrons. They do it right here in St. Louis, 'in slow, old St. Louis,' as we used to say' Could there be any better evidence that slowness and oldness are done with here, that prosperity has reached the stage in which it craves the beautiful, that this is one of the places in the world where there is demand for the work of the man who does the fine things finely.''

This, in truth, is advertising, as we all would have it done. Mr. Strauss has our heartiest congratulations on his success in the new departure and in the fortunate possession of a friend whose discernment is as generously broad as his sympathies. With two such allies in St. Louis, what may we not expect from the forthcoming Exposition?

## THE PRESENT POSITION OF PROFESSIONAL PHOTOGRAPHY IN ENGLAND.*

TWENTY years ago a good practical knowledge and skilful workmanship were considered sufficient to insure success in photography, as in other crafts, but changing conditions and increasing competition have altered this, and we have to accept or adapt ourselves to the newer conditions of business. Look around and see how numberless are the methods employed to create demand; look especially at the publishing trade, which, in a sense, is akin to photography. Look only at one section of our trade, the manufacturing section, how by their system of giving prizes for work done with their plates or their cameras, they utilize to the full the spirit of emulation and rivalry for increasing the sale of their goods; and in looking at these various stimulants note how uniformly they are successful. The full recognition of this principle—the recognition that it is not sufficient to be able to supply goods or take photographs, but that nowadays you must also create or stimulate the demand for them, should turn the threatened injury to our business into an object lesson of the highest educational and practical value. We all know how frequently it happens that the clever craftsman is a poor business man—in our line—a clever operator is often a poor touter. In many instances photographers are such simply out of love for the work, and this, although a great incentive to good work, is sometimes apt to become a danger to business, and it is but natural that this should be the case. We also know how many of the best photographic firms have been founded and run by men having very little, if any, skill as photographers.

Take the case of a photographer in a small town or suburb of say 10,000 inhabitants, who feels he wants to wake things up a bit. Let him go round personally to all the business houses and announce he is going to publish an illustrated pamphlet to advertise their Christmas goods. He will take probably twenty or more small photographs illustrating special goods, new premises, building estates, or the new church, or anything of general interest in the neighborhood, not forgetting one or two portraits. He will send the photographs to the nearest process firm and get half-tone blocks. He will write short descriptive notes, giving a distinctly local color to his production, and developing matters of local interest. And, finally, he will publish and deliver in every home a neat little picture pamphlet that any business man might be proud of. The net result to himself will be that he has come out of his shell, and become personally known to the heads of every business house in the town; he has also advertised himself to every home in the town, and probably has a surplus in hand and the knowledge that he can publish regular pamphlets monthly with increasing popularity and profit both directly and indirectly to himself. Every photographer should be a publisher in his own town, either by himself or in conjunction

* Portions of an address by E. Howard Farmer, delivered at the opening of the Polytechnic Photographic School, London, one of the best of British schools devoted to the teaching of practical photography.

with the local printer or stationer. It may occur to some one that in many cases it would not be practical to be absent from the studio in cases of sitters requiring attention. To overcome this difficulty the suggestion might be made to employ a lady operator at certain hours during the week as a special attraction in connection with ladies and very young children. Excepting the few photographers whose names are as familiar as household words in connection with children, and some others who are also specially gifted in this direction, it is a question whether women are not very much better adapted for photographing young children than men. Both mothers and children are not half so nervous with a woman as with a man; the youngster probably thinks the strange man is a doctor, or wonders what he is there for, or what he is going to do, and in consequence is not so natural. If the child cries the man is quite helpless, and if he touches the darling probably creases the frock or something of the sort. Now ladies instinctively understand these things, and know exactly how to set things right. In the case of the photographer feeling he is not adapted to this search for business, he should at once recognize that he has only half the qualifications for success, and should associate himself with a partner or assistant having the business ability which he lacks.

Having now pointed out one cause of this action of these big firms is that they recognize the importance of continually making fresh efforts to create business, let us turn to another, and that is the extreme ease with which these copies are produced. It is not likely these reproductions would be supplied if they required really skillful craftsmen for their production, and this points to a danger to professional photography which has been threatening for a long time past. During the last twelve years, from a variety of causes, but chiefly from the enormous demand created by amateurs, there has been a gradual simplification of the processes and operations involved in making reproductions by photography, until at the present time practically no skill whatever is required, and this threatens to produce a feeling that the photographer is not a skilled craftsman, and both the dignity and public estimation of him as a worker are in danger of being lowered. This lowering of his status as a craftsman, so to speak, constitutes a danger compared to which the injury done by advertising cheap copying is utterly negligible. The universal respect and admiration which are justly accorded to a painter-artist are largely due to the fact that every one recognizes and is conscious that he or she is quite incapable of such work, and if every Tom, Dick, and Harry could, or thought they could, by buying a few brushes and colors, produce equal results, the reputation of the artist would be very different. Now this is just the danger which is being run by photographers.

The remedy for this very real danger is the obvious one of utilizing every simplification of process, not to save work, but to raise the standard of it, and this not only by combining with the aid of greater skill and higher knowledge, perfect gradation in our prints, with the bloom of mezzotint, and with tones of the value of Vandyke brown, but also by the exercise of talents which only come with long training, those of good taste, and artistic arrangement. One or two suggestions may be given in this direction; the first is the employment of photogravure as a method of printing, and the second is the encouragement of a taste for color. Now that platinotypes and bromides are so generally recognized and accepted for portraiture, there is no difficulty in training young women to color them by hand both tastefully and quickly, and at the same time the work is raised above the scope of the amateur and the cheap advertiser. "The important element of time." Year in and year out the attention of photographers has been directed here at the Polytechnic to the fearful injury to and paralysis of business which result from the inability to deliver photographs, except after long delays. A lady ordered photographs from a West-end firm, and more than a year elapsed before they were delivered. A friend of mine and his wife were photographed last March, and the proofs came promptly, but the finished prints have not yet been delivered. These are, of course, very exceptional cases, but even in a well-managed business the prints are rarely delivered under three weeks,

especially in the winter time. Why does not some enterprising trade printer open an establishment in the south of France or some other place where there is plenty of light, and arrange for the daily transportation of negatives and return of prints by the express Continental mails? Why do not photographers guarantee to deliver in twenty-four hours, if bromides are accepted, there being no reason why these should not be as good as platinotypes, and they are at least as permanent as any other silver prints. If you can give your customers new photographs quickly they are not likely to have old ones copied, for you may take it that except in special cases their friends do not want a portrait of the dead past—ten years, or even two years back—but a living, graceful, and characteristic representation of him or her as they appear to-day. Take, again, the biograph. A man goes down to Dover or elsewhere in the middle of the day, takes thousands of negatives on a long spool, develops and finishes these negatives, prints, develops, and finishes transparencies from them, and shows them to an audience at the Palace Theatre the same evening. Is not this a practical demonstration of business promptitude of the highest educational value to photographers, and does it not seem that something must be amiss with a system which takes three weeks or more to supply a dozen prints from one negative?

Perhaps some one here will mentally hold up their hands in horror and say, "What about art, and the higher cultivation of the ideal in portraiture?" If there is anyone who thinks this, the answer is, "Don't hurry your operator; don't let him have any connection with your mechanical or other time-saving appliances. Let him have everything he wants, and as much time with each sitter as he wants. Let him live in an atmosphere of the ideal, but directly he has made his exposure there is nothing you can do to improve or finish his work that cannot be done in a few hours." In connection with this question of time we have arranged a demonstration of proofs at the time of sitting. It consists simply in taking a negative (a portrait) with the electric light, and obtaining from the developed and fixed, but undried, negative a bromide print or bromide opal with the aid of a copying camera. Now please observe, although it may be very useful sometimes to know you have a pleasing portrait of your client before he or she leaves the premises, it does not seem a very valuable process this of getting proof a few minutes after the exposure has been made; but the reason for giving the demonstration is this: if any photographer starts making proofs in this way it will lead him to fully recognize the commercial value of promptness, and once this is realized, he will not be satisfied with showing rough proofs, and will work out a system for delivering finished copies. In case it may be supposed there would be an insuperable difficulty in the retouching, it may be answered that there are half a dozen methods of avoiding retouching, and in any case it can be done in a few hours.

## VISIBLE DEFECTS IN LENSES.

BY H. FENNER.

THE old adage that the proof of the pudding is in the eating has a very special application to second-hand lenses. It is often impossible to judge whether a lens has deteriorated at all, except by making some test; and very often defects which are very *apparent*, and which seem to seriously affect the selling value of the lens, have no unfavorable effect on the working value. Buying a second-hand lens is rather like buying a pig in a bag, although a second-hand lens is often a great bargain, and one should not lightly be thrown aside because its appearance is not satisfactory. One of the most visible of defects is the scratch. But, as a rule, scratches do not interfere with the working of the lens to a sufficient extent to be discovered by trial, and therefore their presence may be ignored except in so far as they tend to reduce the

price of the lens. A very slight general dulling of its whole surface has a greater adverse effect on a lens; and the repolishing of such a lens (by a competent lensmaker) should be reckoned in estimating its value.

A much worse looking defect—and one which also should have the attention of an optician—is the severing of two elements of a lens which have been cemented with Canada balsam; and yet very often such a defect does not affect working power.

There is a very visible "defect" which is commoner in some modern lenses than in old ones—I refer to bubbles. We have heard so much of these that the man who reads understands why they are present, and accepts them with equanimity. But the man who does not know, and with a dread of the formula "just as good," is rather inclined to be suspicious when he is told that bubbles are not due to bad lensmaking, nor to inferior glass. Briefly, their presence may be explained by the use of some of the more modern kinds of glass. It is owing to the manufacture, after costly and time-taking experiments, of glass having properties different from the old "crown" and "flint" kinds, that many of the latest improvements in lensmaking have been possible. And these new glasses cannot be made in quantity without the occasional occurrence of air bubbles. I do not go so far as to assert that the presence of bubbles signifies a good lens; but I can state that if a buyer makes a selection from two lenses and takes one without bubbles, rather than one with, he very probably will get the poorer lens. For it is quite true that unless air bubbles are very numerous or very large they have no practical deterrent effect on a lens. The disadvantage of an abnormal number of air bubbles is sometimes supposed to be that they stop a certain quantity of light, and so tend to slow the lens. But they do *not* stop the light, they tend rather to *scatter* it. And an extreme number of them, all scattering light, may cause a fogging of the plate. The same may be caused by a great number of scratches. It is quite possible, under certain conditions that a lens may be cracked, or even broken, and yet work satisfactorily. And a lens might have a large central part of it blocked so that it would not pass light and yet take a perfect picture. I have more than once taken pictures with a lens working at *f*/8—8 inches focus—and with a black label the size of a dime pasted in the centre of the glass. Not that there is the slightest advantage in such a freak performance. Perhaps the most subtle of difficulties in choosing a second-hand lens is the forgery of lenses or mounts; although I do not believe this is nearly as common as many people suppose. In case such a thing is suspected, it is well to send the lens to be tested by the maker, if possible, or by some reliable optician. The maker can tell at a glance if his brasswork has been forged, but usually it is only by test that he can say if the lenses themselves are spurious. Sometimes an unprincipled man having a lens by a well-known man, and another of the same size by an unknown man, and of inferior value, will change the mounts, thus increasing the sale value of the inferior lens, without deteriorating the other so long as it is kept for his own use.

Visible flaws have, however, an appreciable effect on the *selling* value of a lens. The man who buys a lens with bubbles or scratches will usually beat down the price.

## DEPTH OF FOCUS AND OTHER MATTERS.

BY T. PERKINS.

Dr. Moritz von Rohr, in a paper read before the Photographic Convention of the United Kingdom at the Oxford meeting of the present year, by considering the angle subtended at the entrance pupil by the diameter of the disk formed on the plane focused for by the rays from a point situated before or behind this plane, arrived at certain interesting conclusions. No matter what is the focal length of the lens, assuming it to be properly corrected for curvilinear and stigmatic distortions, the resulting picture, if viewed at a certain distance differing according to the focal length of the

lens, will be in absolutely true perspective. Indeed, if the negative were held at this distance from the eye situated at the position of the entrance pupil of the lens at the time the exposure was made, and between the eye and the object photographed, it would be possible to make the image formed on the negative exactly coincide with the object photographed, thus showing the truth of the perspective rendering; but if the negative or the print made from it is moved nearer to or further from the eye, then falsity is introduced into the rendering. From this it appears that there is a correct distance for viewing every picture, this distance being, as a rule, not very different from what is called the focal length of the lens.

Since for normal vision the minimum distance at which an object can be clearly seen is somewhere about 10 inches, it follows that no picture taken with a lens of less than about 10-inch focus is ever properly seen, unless an enlargement is made of it. Everyone is aware of the unpleasant effect of architectural subjects taken with a wide-angled lens, as it is called; that is, one of a focus short in proportion to the size of the plate used. There is no real untruth about its perspective, but in order to see the picture as a whole the eye must be placed too far off. Suppose a ½-plate negative is taken with a 4-inch lens and an enlargement made measuring 19½ x 14¼, then, in order to see this picture in true perspective, it should be held 12 inches from the eye—just as it would have to be held had a lens of 12-inch focus been used for the production of a negative from which the print was made direct. But no eye could at this distance see the whole picture comfortably, and so it would be removed further from it, and since the picture is viewed from a wrong distance the perspective seems false, and a wrong impression is formed of the relative size of the different objects represented. Hence, we may learn never to use a lens embracing too wide an angle. But if we avoid this mistake, then it matters not at all, as far as perspective is concerned, what is the absolute focus of the lens with which the negative is taken, for if an enlarged positive is made we get exactly the same result as we should get if a longer-focused lens had been used; and if the picture is enlarged to such an extent that it becomes identical with one which might have been taken from the same position with a lens of not less than about 10 or 12 inches focus, then it will be possible for a normal eye to view it correctly.

There are various reasons why it is more convenient to work with a short-focused lens producing small pictures than with a longer-focused one producing larger pictures. Cost, weight, and size of apparatus are diminished; and, added to this, there is a further advantage which is not so generally known. The shorter the focus of the lens, the better is the definition of objects situated behind or before the plane focused for if the two lenses are working at the same intensity.

The writer of this article, some years ago, by calculating the diameter of the "circle of confusion"—as it is called—of an out-of-focus point, arrived at results which for the sake of simplicity he will give in a numerical form. Supposing two lenses of say 6- and 12-inch focus are used on two cameras, ¼-plate and whole-plate, placed side by side, each being sharply focused for a point say 10 feet from the lens, then a point further off will be represented by a small disk which is larger on the screen of the whole-plate camera, each lens being supposed to be working at *f*/8, and in order to reduce it to the same size as that seen on the screen of the ¼-plate camera, the longer focused lens will have to be stopped down to *f*/32; but if the photograph taken with the ¼-plate camera is enlarged to whole-plate size, then the diameter of the circle of confusion will be doubled, and become larger than that shown in the whole-plate negative taken with a stop of *f*/32. In fact, it will be of exactly the same size as that formed when the 12-inch focused lens is stopped down to *f*/16 only. The absolute apertures of the two lenses would in this case be the same, and this is what is meant when it is said that whatever the focal length of the lens, stops of the same absolute aperture give the same depth of definition. It is only true when all the pictures are by enlargement of reduction brought to the same size—or, what comes to the same thing, when the pictures are viewed from

the absolutely correct distance; these taken with a lens of half the focus being placed at half the distance from the eye at which those taken with the longer focused lens are held.

Important results follow which must be especially borne in mind by those who make negatives with a view to produce lantern slides from them.

If we wish to print by contact, if we double the focus of the lens with which the negatives are taken, we must use *f*/32 instead of *f*/8; *f*/44 instead of *f*/11, and so on, to get objects out of the plane focused for equally sharp. This means, of course, increasing the exposure 16 times. If, however, we make our slide from the ¼-plate negative by contact, and the slide from the whole-plate negative taken from the same point of view by reduction, so that the two slides contain exactly the same amount of subject, then stops of *f*/8 and *f*/16, respectively, may be used, and, working with the longer focused lens we need only give four times the exposure we give with the shorter.

This conclusion exactly agrees with that arrived at by Dr. Moritz von Rohr by a different method, and stated by him in these words: "Assuming two objectives, one of half the focal length of the other, the shorter one will give in a quarter of the time a picture which by subsequent enlargement may be made congrueut to that of the larger."

Hence, for interiors or subjects in which a reduction of the time of exposure is important, it is well to use short focus lenses and print by contact rather than longer-focused lenses and then print by reduction.

For most subjects, when printing by contact, a 3-inch lens will be the best to use, as the lantern picture will seldom exceed 2¾ x 2 inches. Such a lens will possess great depth of focus, as it is called, even with a large stop. A ¼-plate camera will generally be used, as at present, save in hand cameras smaller sizes are only made to order. It will be found a considerable help in composing if a square apertured lantern mask is stuck on the focusing screen, as it will show the greatest amount of subject that can be got on the lantern slide.

When a slide is produced with this lens, and projected on the screen so that it is magnified 24 diameters (3 inches converted into 6 feet), then that person among the spectators who sits at a distance of 6 feet from the screen, and straight in front of it, will see everything in correct perspective. It is impossible for all those in the room to see the projected views correctly. This is unfortunate, as the enjoyment of a lantern exhibition depends greatly upon obtaining the right position for viewing the pictures, especially when they are subjects in which perspective plays an important part.—*Magic Lantern Journal.*

## THE OKLAHOMA CONVENTION.

We offer our sincere apologies to the enthusiastic and hardworked officers of the Photographers' Association of Oklahoma and Indian Territories for the omission of the report of their convention from our last issue. The two days' meeting, held in Oklahoma City in October, was wholly successful, and those who attended enjoyed its advantages to the full. The following extracts from the Secretary's report give a glimpse of the proceedings and of the men who "put it through." We quote:

### First Day.

"After lunch, meeting called at 1.45 P.M. The President read the names of the judges —P. A. Miller, I. W. Saunders, and E. W. Oliver—who were given their instructions, and left to wrestle with the subject of 'Art in Photography' or 'Photography in Art' (either way), while all the rest of us quietly adjourned to the Oliver Studio to take notes on handling Aristo papers—the tones that that man Wright gets on Aristo-platino and Collodio-Carbon would make a man fall in love with his boarding-house keeper, if she were only on paper—why, it is just as easy; no trouble at all. He put in the prints and patted and slapped them a little, and then turned them a time or two and took them out, and just the memory of the elegant tones he obtained

would keep a man in good humor for at least a fortnight of the worst kind of weather and bad luck.

"He says we can all do the same trick —he told us how, that is the nice part about it. Well, we had a good time, and adjourned for supper, to meet again at 9.30 for the 'big spread'—everybody was there (about 10 P.M.), about thirty-six at the table. Oh, you fellows that were not there do not know what you missed. We had a good time all the time."

SECOND DAY.

"Next morning, after we had soaked our heads in cold water so they would hold ideas, we assembled in the studio again at 9 A.M., to examine a few samples of light, under the care of Mr. Nottingham, of the Seed Dry-Plate Company. His demonstration was short but practical, and right to the point, worth one hundred and ten cents on the dollar, and was highly enjoyed by every member of the fraternity present. Probably nothing that occurred during the convention made a more lasting impression on the minds of those present. We would not have missed it for three times the price of admission.

"Mr. Smith then took the floor and gave us a highly instructive talk for forty-seven minutes, after which we again moved over to the hall to hear the report of the judges, which here follows:

"*Prize-Winners' Class.* Nine assorted prints from cabinets up. W. C. Palmer, of Muscogee, first; W. E. Brooks, of Norman, second; Tackett Bros., of Enid, third.

"*Class B.* Eight prints, 8 to 12 inches. Miss Katherine Pennistone, of Shawnee, first; F. L. Conner, of Purcell, second.

"*Class C.* Twelve prints, cabinets to 8 inches. A. Herringer, of Shawnee, first.

"*Class D.* Twelve cabinets. A. A. Bass, of Chandler, first.

"*Class E.* Views. W. C. Palmer, first.

"*Genre Class.* One ten-inch. A. A. Bass, first.

"*Rating Class.* Six cabinets. F. L. Connor, first.

"Everybody expressed themselves as well pleased, and extended a vote of thanks to the judges. After another talk on pictures, with criticisms on exhibits by Smith and others, we again adjourned for lunch.

"The principal business of the afternoon session was the election of officers for the ensuing year and the selection of place of meeting. The following were elected as officers:

"*President*—W. C. Palmer.

"*First Vice-President*—E.W. Hamilton.

"*Second Vice-President*—J. B. Drake.

"*Secretary and Treasurer*—W.E.Brooks, of Norman, Okla.

"Oklahoma City was selected by ballot as the next place of meeting, winning over Guthrie by only two votes. After this business was disposed of a general visit and rambling discussion—sort of an experience meeting—occupied the time until we adjourned for supper.

"In the evening the men met at Hamilton's Studio by mutual consent to have a sociable smoke. Later the ladies came in, and we all ate candy and chewed gum while Smith told funny stories. He also showed us how to play a few cards. It would be no trouble at all for the 'leopard to change his spots' if Smith would coach him a little. Don't see why a fellow that handles cards the way Smith does should need stay in the photographic business. Must like pictures pretty well.

"The attendance at this convention was much larger than last year, and the members much more active; the exhibits were larger and showed vast improvement in the twelve months since the first meeting. The inter-State exhibit, composed of *the best of all the best* from the exhibits at conventions preceding ours, elicited much comment—and discussion 'on the side.'

"Our contribution to this exhibition was a large cabinet head of an Indian girl, from the exhibit of W. C. Palmer. The judges also selected three pictures from the first two exhibits in the prize-winner class, to be sent to the Photographic Society of Moscow, Russia, in response to an invitation from their 'Bureau of Administration' to the photographers of the two Territories to take part in their photographic exposition, which occurs in March, 1902.

"Altogether our convention was a success, and we hope for better things another year. Here endeth the report of the second annual convention of the P. A. of O. and I. T.

W. E. BROOKS,
"Secretary."

# DOES PUSH PAY?

BY PAUL CLARE.

WHAT becomes of all the money spent in advertising? Is it lost? How can any firm pay $4000 for one announcement on one page of a monthly magazine? How can a hundred firms afford to pay $200 to $300 for a page announcement, in no special position, but sandwiched and buried among the other ninety-nine advertisements? Such are a few of the questions which naturally occur to many people as they turn the pages of our national magazines. Timidity says that such heavy outlays cannot return; common sense says that the fact of the advertisements reappearing so persistently is sufficient proof that the advertisements *do* pay; and the shrewd, long-headed men who pay hard cash for those advertisements give their decision on the side of common sense.

It is some years since I first practically experimented in the advertising field. At that time advertising was not the fine art it has since become, and altogether a launch was more of a venture than it would be to-day. I spent one hundred dollars in circulars, postage, and other ways, and I *traced* returns to the extent of four dollars; next month I ventured eighty dollars, and the returns rose to 10 per cent. The third month the results fell again, for from eighty dollars I could trace but four dollars returns —not profit, mind you, but returns. Try as I would I could not get the returns up to 50 per cent. of the outlay. And yet the advertising paid me. For six months I dropped advertising altogether, and I just managed to keep my bank balance from shrinking; before that it had slightly grown. When I recommenced advertising I spent an average of $100 per month on it, and at the end of six months, in spite of the $600 spent, my balance had increased $240. The difference was made up doubtless by orders which I had no means of checking, and by orders from dealers, though I chronically believed that the latter were pitifully meagre. To leading photographers I may appear to be talking in very small figures, but the principle holds good, whether the amount be small or large. Since the days of that early business I have often ventured into advertising, and always with the same result, unable to trace direct returns, but convinced that, as a whole, the effort pays. Some things are advertised which depend wholly on direct returns; some advertisers wish merely publicity, and even go so far as to refuse direct returns.

I do not mean to say that advertising invariably pays; wild-cat advertising will swallow money about as quick as most things—or a little quicker. And money can be lost, even with careful advertising, unless it is backed by some experience or by considerable prudence. But, as I have more than once pointed out in WILSON'S, advertising does not necessarily mean parting with cash. I remember a man who ran one of the counters in a large dry-goods store. It was a counter of notions, such as few people go to a store to buy, but when they are there they buy simply because they see them. One day he so arranged his counter that it projected a little into the alley-way. It was just enough to cause people to swerve a little in passing it, and the momentary pause thus caused was sufficient to let the stall catch the eyes of those who passed. That slight alteration almost doubled his receipts.

The photographer recognizes the value of advertising—publicity—when he stocks his show-case, or window, or reception-room. And if fifty people notice the case in a day it does a certain amount of good. If he can make his case so attractive that one hundred people daily notice it, he doubles the value of his publicity. And this, not by expense, but by a little thought and up-to-date care. All the special exhibitions held by some men are so much publicity, and it is a similar wish which helps to make the convention exhibition a success. If the photographer can judiciously place money in advertising he may make it pay. The photographer who can by a use of his brains make his name more widely known will *surely* make it pay.

# EQUALIZING THE ILLUMINATION OF DARK AND LIGHT OBJECTS.

BY A. T. NEWTON.

It will not be long before the merest tyro in photography becomes aware of the fact that when exposing sensitive plates on outside subjects, in which more or less sky forms part of the picture in nearly every instance, unless some special provision be made to equalize matters, an exposure necessary to bring out full details in a dark foreground will be found much too great to render the sky satisfactorily. Apart from such subjects in landscape work, where the sky and foreground offer such a difference in the amount of illumination, it will be found that there are very many other subjects in which violent contrasts in light and shade are met with, to photograph which satisfactorily required special treatment in exposure, whereby the brightest lighted portions of the view are retarded until the darkest parts are fully exposed. Subjects of this kind are seen in what may be termed close studies, or it may be even in landscapes, which embrace dense masses of dark foliage in opposition to other portions of a view which are brilliantly lighted by strong sunshine. In the copying of oil paintings again, where dark sombre tones are seen in opposition to delicate sky effects, this same difficulty is met with in perhaps even a more pronounced form, for it is well known that anything like success in photographing paintings can never be achieved unless resort be made to some method of dodging, whereby the illumination of certain portions of the sensitive plate be so modified as will prevent the highest lights being hopelessly over-exposed and buried before the darkest portions are rendered with sufficient detail in the negative to print harmoniously.

For many years much ingenuity has been displayed to provide a mechanical means to counteract what may be termed violent contrasts in illumination, and among the various devices employed may be mentioned special shutters, which, in operation, permit of a longer exposure being given to a foreground than to the sky. And, again, for special landscape work sky shades have been designed by which the same results are achieved by providing a movable shield that is capable of being altered in form so as to conform to some extent to the shape or contour of the skyline in the picture. A very excellent sample of this form of apparatus was that designed many years ago by Mr. Parker, of the West of Scotland Amateur Society, which, in the days when plates of less exalted degrees of sensitiveness were employed (such as Wratten's slow landscape plate of about 12 sensitometer) yielded most striking results by permitting quite a wide range of exposures to sky and foreground. The shutters, however, which years ago were designed for this purpose, partook more or less of the drop form, and upon the shape of the cut-out portion of the drop depended, in a large measure, the amount of illumination accorded to the foreground and sky. These old-fashioned forms of metal and wooden shutters worked well enough in competent hands, but were shortly afterward displaced by the well-known roller blind and other forms of modern shutters, in which no provision is made for any equalization of illumination, and, therefore, when such modern forms of shutters are employed other means must be resorted to for gaining the results. It seems strange that so many of the useful little dodges and appliances which years ago were well known to professionals and amateurs alike should have been permitted to sink into what may with truth be termed disuse. Doubtless, the rage for snapshot work has militated against the more healthy form of landscape photography as practised during the days of collodion, or even the introduction of the modern dry plate, and this rage for hand-camera work has, with a large portion of amateur workers, at least, done much to curtail the employment of larger cameras, and with them to bring into disuse many of the little additions to a photographic outfit which twenty-five years ago proved so effective in landscape work.

Among other dodges employed nearly a

quarter of a century ago for equalizing exposures of sky and foreground and similar subjects may be mentioned that of using a special form of diaphragm in the lens, not the least advantage of which lies in the fact that such forms of diaphragms are capable of being employed with almost any pattern of shutter. This effective little dodge consists in using a diaphragm placed obliquely to the axis of the lens, or, as it may perhaps be more simply stated and easily understood, by placing the diaphragm in the lens at a slope instead of at right angles, as usually fixed in lenses. A little consideration will enable anyone to understand how differently a diaphragm placed obliquely to the axis of the lens will act when compared with one placed in the usual manner, for the diaphragm, when so placed, as may be said, to be sloping downward, will permit of a much greater amount of illumination reaching the sensitive plate from the foreground than would be possible from the sky. Another also equally effective little dodge employed many years ago by expert landscapists was the placing in front of the ordinary diaphragm of the lens a piece of blackened brass of a V-shape, base upward: a few trials will soon indicate the proper position to place this in, and by means of this simple little contrivance, quite a variety of effects in lighting, or rather in cutting off from a sensitive plate undesirable illumination, may be produced. Such are among a few of what may be termed mechanical dodges employed by old landscape workers in shielding a plate.

Personal equation no doubt enters largely as a factor into this question also, for an experienced operator can achieve much without the aid of any mechanical appliance. It is well known that experienced landscape workers seldom use the orthodox lens cap when making their exposures; a much better contrivance will be found in what may be described as a square pad or pin-cushion; with this little tool an operator can deftly so shield any portion of a picture as to yield surprising results, the shape of the cushion lends itself admirably for the purpose, for it will readily be seen it can be used as a straight bar across the top of the lens, or it may be inclined diagonally to any side, according to the form of the object. A novice will find there is a great deal to learn in what to many may seem only a trivial item, viz., the removal of a cap or other cover from a lens during exposure. An experienced worker can readily be detected by the manner in which he "hinges" the cover. This action differs materially from the sudden pull off a novice invariably gives when exposing a plate, a method which always yields some amount of movement to the camera. And it is just here where the utility of modern apparatus may be questioned. During recent years there is no doubt everything has been done on the part of manufacturers to produce cameras and tripods as light as possible, until what is known as the modern up-to-date form of camera" is as different from the good old box as chalk is unlike cheese, and this is strikingly shown also even in hand cameras, many of which are so made as to practically make them quite useless in the production of sharp negatives. Any camera that will not permit of its cap or cushion being removed without showing signs of movement, and even leaving a good margin of stability on hand, is worthless, and when, in addition, it comes to be that the exposures are made by means of shutters, then the movement is likely to be more pronounced still, for there are very few cameras that are proof against vibrations when shutters are employed. Should any doubt the accuracy of this statement, let them apply the simple test of placing a tumbler of water on the top of the camera, and then carefully watch for the agitation of the water at and immediately before the moment of releasing the shutter. It takes a very substantial form of apparatus to stand this simple test. Somewhat recently the writer of these lines had occasion to discuss the question of vibration in the matter of hand-camera exposures with a gentleman who prided himself that all his exposures were practically sharp. On closely scrutinizing some 250 quarter-plate negatives, not five were found absolutely sharp, and even when his high-priced hand-camera was used on a tripod, the water test at once revealed where the shortcoming lay, viz., the release of the shutter.

In the near future we are promised something like a revolution in the form of

our cameras, for, if all reports be true, we are likely to run from wood into metal in the manufacture of cameras. Such, in fact, may be said to be already the case, for metal cameras of surprisingly small bulk and lightness are now being produced, which the makers claim are a long way ahead of the wooden form of box that has held sway for so long. This may be so, and on the face of matters there seems no reason why metal cameras should not be as rigid as wooden productions, but unless manufacturers pay more attention to rigidity in the future than they have in the past, there will always be those who will look with satisfaction to the earlier form of box, cumbersome and heavy though such may be.—*British Journal of Photography.*

## HELPING FAULTY NEGATIVES.

BY JOHN A. TENNANT.

ALTHOUGH there is no lack, either of reliable plates and films for every conceivable purpose, or of information concerning their proper exposure and development, the personal factor, which should control and harmonize all other factors, introduces so many variations that good negatives are by no means as common as they should be. Thus, if we look over our negatives, together with a set of prints from them, we will find few that are really satisfactory, judging them by the prints they give—for which purpose they were made. In the majority we will see that by personal error, in the choice of the plate, in exposure, in development, or some other detail, normal conditions were upset, and a good negative was made impossible of attainment by normal processes. Here we see a negative full of detail, but weak or thin in opacity. The contrasts are so weak that it will give only soft, flat prints without force or brilliancy. The errors here were over-exposure and under-development. The remedy is intensification, the strengthening or intensifying of the opacity or contrasts of the negative. In another negative the image has overmuch density, with excessive contrast. The exposure was a trifle short and the develment unduly prolonged, or a developer was used which gave density more rapidly than detail. The remedy here indicated is reduction, the weakening or reducing of the opacity and contrasts in the negative. These are extreme cases. In some negatives we require a little more, or a little less, force in the foreground; or we have a seascape in which the sky and clouds are buried in excessive density. Local intensification or reduction are here suggested. Or it may be that we desire to change the character of a negative, or to modify part of it, to adapt it to a new printing paper, or to secure certain effects. Hence arises the necessity of being familiar with the various methods available by which a negative, already developed and fixed, may be so changed or modified as to yield more satisfactory prints than could be obtained from it in its original condition, or to save a negative otherwise useless.

In almost all intensification and reduction processes it is essential to success that the negative under manipulation shall be free from hypo, chemical stains, grease, varnish, or other agent in the film which can in any way interfere with the uniform action of the intensifier or reducer employed. The more care we take to ensure that our intensifier or reducer is working upon a simple image of silver in gelatine, the better will we succeed.

The greater part of the failures, stains, fog, streaks, and other troubles encountered in intensifying or reducing negatives, have their origin in lack of carefulness at the start, and the importance of the thorough preparation of the negative cannot be urged too strongly. When about to intensify or reduce a negative, therefore, first remove all varnish (if it has been varnished) and grease or dirt from the film. If there is any uncertainty as to whether the negative was properly fixed, it is advisable to soak it in water for a few minutes to soften the film, and then refix it as a precautionary measure in a freshly-mixed fixing solution. For the reader's convenience formulæ are here inserted. *Plain Fixing Bath:* Dissolve 1 pound of hypo-

soda in 2 quarts of water; or, 4 ounces of hypo in a pint of water, according to the bulk of solution needed. An acid fixing bath is preferred by many workers as hardening the gelatine film and clearing the shadows of the negative better than a plain hypo solution. I have used Carbutt's *Acid Fixing Bath* with great content, as follows: Sulphuric acid, 1 drachm; hyposulphite of soda, 16 ounces; sulphite of soda, 2 ounces; chrome alum, 1 ounce; warm water, 64 ounces. To prepare this bath conveniently (it will serve the ordinary amateur's needs for a full year), put 48 ounces of warm water into a large bottle, such as those in which mineral-waters for table-use are sold, and add the hyposulphite of soda; dissolve the sulphite of soda in 6 ounces of warm water; mix the sulphuric acid with 2 ounces of water and pour slowly into the sulphite solution, after which add to the hyposulphite solution in the large bottle. Now dissolve the chrome alum in 8 ounces of water, and add it to the bulk of the solution, and the bath is ready for use. Fix or refix the negative in this bath by immersing it for fully fifteen minutes, then wash for half an hour in running water to clear away the hypo in the film. After the negative is well washed, swab it carefully with a wad of wet cotton to remove any deposit left by the washing water, and place in a tray containing distilled or cold boiled water until ready for intensification, etc.

In several methods, such as in mercurial intensification, it is absolutely necessary that the negative film be wholly free from any trace of hypo, or stains will result, to the utter ruin of the negative. The best hypo eliminator is careful washing in a stream of running water, but there are commercial preparations which are said to do the work with greater certainty.

It is also desirable that negatives which are to be intensified should be, as far as is possible, free from fog or stain caused by prolonged development. Such discolorations may be removed by the use of a clearing bath. A reliable formula is given by Hauff, as follows: Thiocarbamide, 300 grains; citric acid, 150 grains; water, 1 quart. The negative is immersed in this after the usual fixing and washing. When thoroughly cleared, it should be again washed for a short time. Another good clearing bath for removing general fog or yellowness from negatives is as follows: Pulverized alum, 55 grains; water, 20 ounces; to this add, slowly, sulphuric acid, 1 drachm.

Iridescent stains or markings on a negative are sometimes the result of overmuch saturated solution, 5 ounces; common salt, ¼ ounce. Wash well, and blacken in ammonium sulphide, 1 ounce; water, 10 ounces. This solution has a powerful and unpleasant smell, hence it should be used near an open window.

It may be here mentioned that the stains which at times result from mercurial intensification can be removed, it is claimed, by washing the plate for a few minutes, and then immersing it in a 10 per cent. solution of ammonium sulphide, but this is a doubtful remedy.

If instead of blackening the bleached image with ammonia, we use sulphite of soda, the silver chloride is dissolved as before, and we get an image composed of black metallic mercury. As commonly used, an equal amount of potassium bromide is usually added to the bleaching solution, making it practically a mercuric bromide solution. The image so obtained is less intense than that given by ammonia, but an advantage of the method is that there is less necessity for prolonged washing between bleaching and blackening the plate. I give a typical formula. *Bleaching Solution:* Mercuric chloride, 1 ounce; potassium bromide, 1 ounce; water, 40 ounces. When the image is bleached, rinse the plate in water to thoroughly remove the mercury, and immerse it in the *Blackening Solution:* Sulphite of soda, 1 ounce; water to make 10 ounces. When intensity is reached, wash the plate and dry as usual. If the sulphite fails to do its work, the cause is probably alkalinity of the solution. Add a few drops of citric or sulphuric acid.

Although a patented preparation, the *Agfa* 1-solution intensifier recently introduced possesses sufficient general interest to be mentioned here. It is based on the use of double salts of sulpho-cyanide of mercury and an alkali metal, and comes in the form of a concentrated solution, 1 part of which is diluted with 9 times its bulk

of water for use. Negatives, duly fixed and washed, are immersed in this dilute solution, and gradually darken with a grayish black deposit of greater intensity than that given by the mercuric bromide and sulphite method. The action is somewhat slow, which is advantageous. When the desired density is gained, the plate is washed for ten or fifteen minutes, and dried. The advantages of the single solution, without necessity of using the preliminary bleaching solution, will be obvious.

## CHIPS FROM A PHOTOGRAPHER'S WORK-ROOMS.

*The unventilated dark-room* is an unhealthy one. Too many photographers still cling to the notion that any cramped little hole is "good enough." The dark-room is one of the most important rooms. It should be sufficient in size, convenient in arrangement, and *well ventilated.*

*The photographer* who turns out a print mounted in slovenly fashion has not a single excuse—except carelessness—to hide behind. We have noticed in several show-cases—with low-priced work in them—prints trimmed with a jagged or slightly uneven edge, or not trimmed true, and uneven circles which have been first ruled with a pencil around a tea-cup and then clipped out with scissors. And they are not always mounted centrally true. Cutting shapes and cutters are cheap, and a little care does not cost a cent in hard cash.

*With very old* and very young people it is a fatal mistake to under-expose a negative. The negative *must* be fully exposed, and developed for softness. It will then require a minimum of retouching, and will give a maximum of satisfaction.

*There are two ways* in photography; one is to hunt around and make business, the other is to wait for business. Every successful man can say which is best.

*In winter*, studios and work-rooms are all heated. We do not nowadays put bottles of collodion before the fire in order that the contents may become workably warm. But in spite of that we have not yet entirely got rid of risk of fire. Many a good man has seen the business and work of years go up in smoke, and has begun again at the bottom. There is no absolute preventive of fire, but insurance will save ruin. If you are not insured, see about it to-day—not to-morrow. If you have a policy in your safe, see if the time is running out, and do not let it lapse.

*Bubbles During Development.* Some photographers (or rather, some photographers' assistants) seem unable to get hold of the knack of immersing sheets of bromide or other development paper without being troubled with air bubbles. Unless these are burst with the finger or with a brush they show as white spots on the finished print. Especially is this the case with very rough paper. To a certain extent bubbles trouble plates, but not so much as they do papers. They may very largely be avoided by immersing the paper film side downward in the developer; as soon as the paper is wetted it can easily and safely be turned over. The development of more than one print in one dish has a hidden danger, for in immersing a second print bubbles of air may be transferred from it to the first print—an additional reason for having the first print face downward.

*It* is a very good wrinkle for the dark-room, especially in the case of those unfortunate photographers who use a very dim and very ruby light, to screen the eyes from the direct light. To have the light directly before their eyes is objectionable in a double sense—first, from the danger to the eyes; and, secondly, from the retinal glare diminishing the delicacy of perspective of any object—a negative, for example, —that it is desired to scrutinize. All lights in front of the face should be so screened as to be shaded from the eye while falling unchecked (of proper strength, of course) upon the developing. There are many ways of doing this; to speak of it is almost to point out the remedy. We know one photographer whose light is rather low

down, and he screens by the simple plan of placing his chemical shelf just the right height to act as a screen of this kind.

*Success* depends more on the man than on his appliances. Here is a description of the "studio" of a well-known old-line worker in the days when photographers were nomadic. His studio, which he moved about from place to place, as suited his fancy, consisted of two pairs of blankets, stitched together end to end, forming a sheet of about fifteen by seven feet. One end was tacked to a ridge-pole about ten feet from the ground, and it descended like the roof of a tent to another pole two feet lower and five feet to the right or left, and from that to the ground. The hand screens were simply barrel hoops covered, some with white and some with brown paper, to which handles like broomsticks were fixed.

With such primitive appliances he seemed to have had the lighting under perfect control.

*Waterproofing Blue-prints.* A simple and inexpensive method of waterproofing the prints which renders them completely impervious to weather and water is given in *Mines and Minerals.* The waterproofing medium is refined paraffin, and may be applied by immersing the print in the melted wax, or more conveniently as follows: Immerse in melted paraffin until saturated a number of pieces of an absorbent cloth a foot or more square, and when withdrawn and cooled they are ready for use at any time. To apply to a blue-print, spread one of the saturated cloths on a smooth surface, place the dry print on it with a second waxed cloth on top, and iron with a moderately hot flat-iron. The paper immediately absorbs paraffin until saturated and becomes translucent and highly waterproofed. The lines of the print are intensified by the process, and there is no shrinking or distortion. As the wax is withdrawn from the cloths, more can be added by melting small pieces directly under the hot-iron. By immersing the print in a bath of melted paraffin the process is hastened, but the ironing is necessary to remove the surplus wax from the surface, unless the paper is to be directly exposed to the weather and not to be handled. The irons can be heated in most offices by gas or over a lamp, and a supply of saturated cloths obviates the necessity of the bath. This process, which was originally applied to blue-prints to be carried by the engineer corps in wet mines, is equally applicable to any kind of paper, and is convenient for waterproofing typewritten or other notices to be posted up and exposed to the weather.

*The Action of Various Reducing Agents.* The brothers Lumière favor us with a copy of their recent paper communicated to the French Photographic Society, wherein they detailed their experiments on the action of the persulphate reducer, as compared with other oxidizing reducers; for example, peroxide of hydrogen, permanganate of potassium acidulated with sulphuric acid, and bichromate of potassium acidulated with sulphuric acid. Trial negatives were made by exposing a plate in stripes or bands, so as to obtain degrees of density having a relation to the exposures. Pieces were now cut from this plate across the bands and treated with the various reducing agents. The authors conclude that persulphate of ammonium is the only reducer which can be used in actual practice for reducing a negative without attacking the fainter gradations. In addition the Lumière Brothers have made the following observations: 1. Persulphate of ammonium solution acts more rapidly when the negative is wet than when it is dry. 2. The action does not commence immediately, but when once commenced it progresses regularly. 3. Negatives weakened to the required degree by means of ammonium persulphate should be immediately immersed in a bath calculated to destroy the superabundant compound, as, for example, a solution of an alkaline sulphite. In spite of this precaution the reducing action continues after withdrawal from the persulphate bath. 4. Whatever be the concentration of the ammonium persulphate solution, the ratio of reduction is the same for the various parts of the subject. 5. Fog, due to over-exposure, is not removed or appreciably reduced by the ammonium persulphate reducer.

PORTRAIT
By I. de Vos, Chicago.

A PORTFOLIO PORTRAIT

Vignetted and finished in pen and ink; print on Aristo Carbon, sunk centre; original size of this page of the Magazine

By I. de Vos, Chicago

"LITTLE MISS MUFFETT"
By Dan. L. Johnson, Oshkosh, Wis.

AN AUTUMN MORNING
By C. H. Miller, Oxford, Pa.

PORTRAIT

By D. D. Spellman, Detroit

638 The Old Liberty Bell

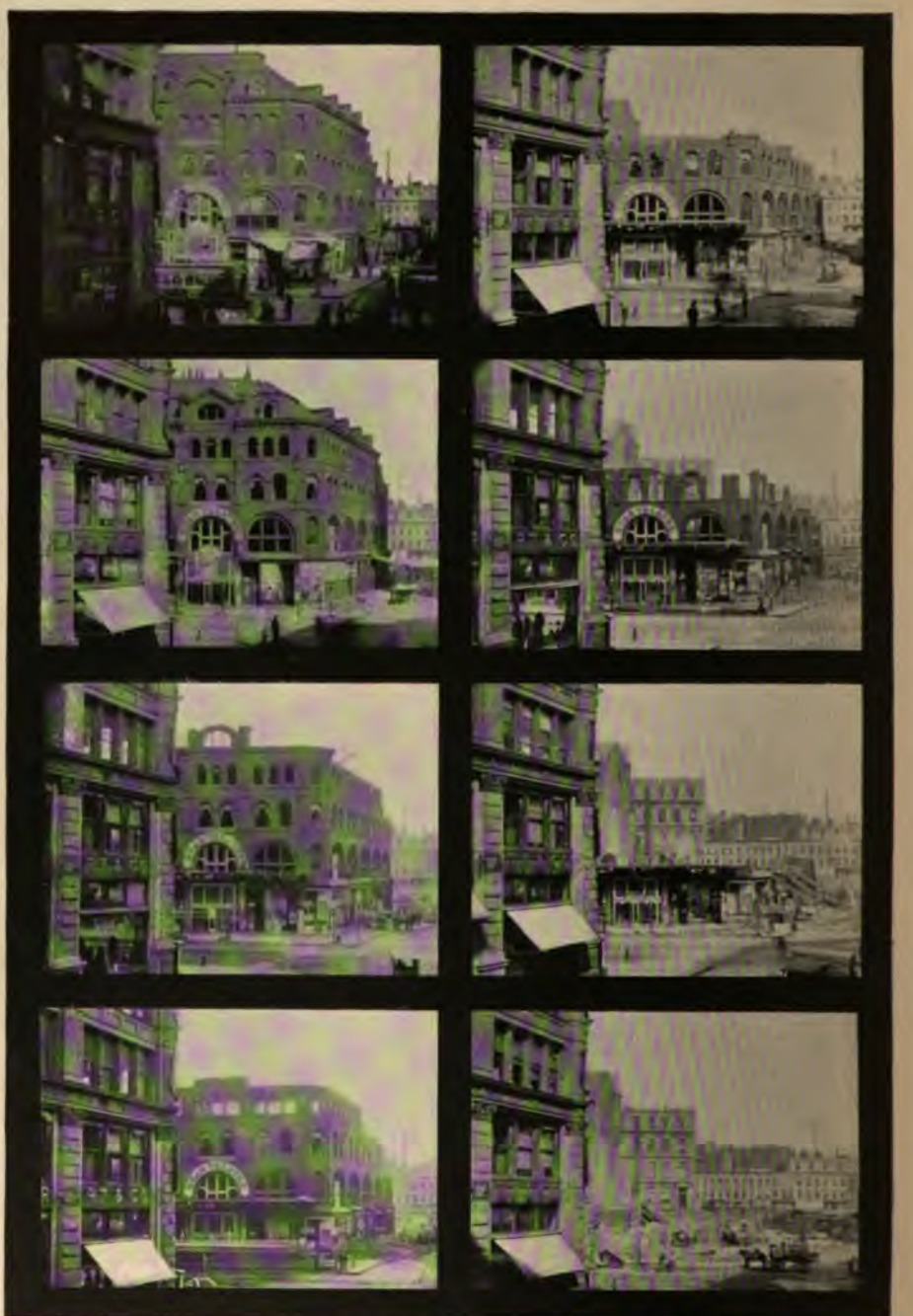
THE OLD LIBERTY BELL

By R. Newell & Son, Philadelphia

THE CRADLE OF LIBERTY

Views in and about Independence Hall, Philadelphia

Copyright 1900 by R. NEWELL & SON, Philadelphia



THE BIOGRAPH AS A RECORDER OF CURRENT EVENTS

**Pulling down the old Star Theatre, Broadway, New York**

By The American Mutoscope and Biograph Co., New York

## THE BIOGRAPH AS A RECORDER OF CURRENT EVENTS.

PATRONS of prominent vaudeville theatres throughout this country and abroad will shortly be somewhat astonished by a motion picture showing in two minutes the demolition of a building, which demolition actually required a month. This moving picture film was made by the American Mutoscope and Biograph Co., and the subject was the pulling down of the historic Star Theatre building, at the corner of Broadway and Thirteenth street, New York, to make room for an office building.

To accomplish this unique feat a biograph camera driven by specially devised electric apparatus was placed in the second-story window of a building on Thirteenth Street, about 150 feet southwest of the Broadway front of the theatre building. A skilled operator was constantly stationed at the camera, and exposures, regulated in duration by light conditions, were made every four minutes, eight hours a day for each working day of four weeks, during which period almost every possible circumstance of weather was encountered, from fog and rain to bright sunshine. On another page we reproduce a few of the pictures by the courtesy of the American Mutoscope and Biograph Company.

In making the pictures forming the series, the ordinary short exposure (1/150 of a second) was prolonged very considerably, so as to give moving objects on the street, such as pedestrians, wagons of all kinds, and trolley cars, an opportunity to move about and get out of the way during the exposure. If this method had not been adopted one picture would contain perhaps a trolley car clear and sharp, in the middle of it, and the next picture no car at all, or something else in its place. In order to be able to give such long exposures the obvious expedient of diaphragming the lens was adopted. The size of each individual negative on the film was 2 x 2¾ inches.

Before the contractors began the work of tearing down, and after their work of destruction had been completed, fifteen seconds of exposures were made at the biograph's normal speed of thirty a second. Thus, in the finished positive, one views at first the old Star Theatre, standing, as it had for years, looking down with serenity upon the bustle of Broadway traffic. Then, as if struck by a tornado of supernatural strength, the building begins to crumble. Chimneys totter, walls cave in, and whole stories vanish, until, at last, the site shows only a cellar excavation, and the Broadway cars, with the sidewalk procession, continue as if nothing unusual had happened.

Although many varying light conditions were met with, the resulting positive shows very few inequalities. The only marked contrast between the light and dark days is shown in the sharp shadow of a high building overlooking the Star Theatre site. When the light was poor this shadow is almost, if not entirely, imperceptible; but on days when the sun was bright the shadow darts across the plane of the picture with inconceivable speed, showing plainly that the hours of reality are but seconds in the picture.

A still more novel effect is obtained by projecting this film in reverse, and thereby building up in two minutes the structure which the constructors were a month in razing. In reproducing these examples of biograph photography we cannot forbear a word of admiration for their excellence as photographs, especially considering the conditions under which the work was done. The remarkable technical quality of biograph pictures, noticed wherever they have been shown, is due, in a great measure, to the splendid equipment of the photographic department (brains and tools) of the American Mutoscope and Biograph Co., which department is under the management of Mr. A. E. Johnstone, one of the most gifted of American workers in photography.

---

WE regret that the circular portrait of a child presented among our November supplements was credited to Mr. D. Rosser, of Pittsburg, instead of to Mr. W. N. Brenner, of Cincinnati, by whom it was made. It is a delicate bit of child portraiture, and we are glad to put the credit where it belongs. The print came to us without a name on the mount, hence our confusion.

# MINIATURES.

BY CARINE CADBY.

AFTER a goodly time has been given to practising coloring platinotype prints the worker may begin starting on ivory; but let him first be sure he has really acquired some skill by practice in handling his brush, for ivory needs more skill and care. Small pieces of ivory suitable for our purpose can be bought at any artist colorman's. Before beginning to talk about painting the print it would be more to the point to mention, first of all, how the print is got on to the ivory. The best way I know of is by the carbon process (double transfer). It is described very concisely in the Autotype Company's little book. The color I should advise for this purpose is sepia. Before the ivory is printed on it must be cleaned with pumice powder and a soft rag. As soon as the print has been squeegeed on to the ivory it shows a strong inclination to curl, and the best way is, when it is finished and dry, to place it in a heavy book until it is required. A good plan, too, to keep it flat while it is being used is to slip it into a card in which slits have been cut to receive it. Before beginning to paint, the worker must once more rub the surface very gently with pumice powder. And now, when everything is ready, the first wash of color is applied. This time there is no preliminary wash with water, and the second brush must only be applied very gingerly to take off the hard edges. In fact, it is really safer to just wash over, and, if the edges are any way passable, to just leave them alone. The rule is, never to go over the same surface twice within half an hour. When this fact has been realized and all the washes are on, it is best to leave the miniature for a time and to start again when everything is dry. This is only advice to a beginner, who always gets through his washes in such an incredibly short time. One cannot be too careful at first, and it is so disheartening to see the film coming away on one's brush, leaving a little jagged hole of naked ivory, and only because one had dabbed the same spot over once or twice in trying to get the color even. One must remember the surface of the print on the ivory is really a film, and so is just as tender as the film on a negative, and we all know how few liberties that will allow. For the consolation of those who have in this way spoilt their prints, let me say that the ivory itself can be used over again; the invaluable pumice powder can rub off the image and paint, though, of course, there is the trouble of the carbon process to get a fresh print on.

A PHOTOGRAPHIC MINIATURE.
*By Dudley Hoyt, Rochester, N. Y.*

One cannot deny that it is not easy work to paint or photograph on ivory. Platinotype is a more straightforward material, and, after trying for a short time, very probably the photographer—if he is like the writer of this—will put away his ivories and go back to platinotype. But, alas! with no satisfaction, for who can be happy in the desert when he has once viewed the promised land? Paper fails to give the wonderful flesh tints of ivory; the hair looks dull and colorless, and the eyes have

no sparkle. How generous, too, is ivory to one's painting! Nothing sinks in; every touch tells. Our colors, too, have that delicate translucent appearance that is never seen on a platinotype. And as for mistakes, they can all be wiped out with a wet brush or softened down with pumice powder. Our stippling, too, not only looks much better, but is actually easier to do than on paper.

In the end we go back to our ivories with a fresh supply of patience and energy; and when this is the case we can't fail to accomplish our ends, and no one who has once begun can deny the fascination of painting on ivory.

For practice and as a substitute for ivories, ordinary carbon prints are very good. In the same way they are prepared for painting by being rubbed over with pumice powder.—*The Amateur Photographer* (London).

## A CRUCIAL TEST OF A BACKED PLATE.

SOMETIMES pictures speak more plainly and more forcibly than words. There has been much talk of late concerning the practical advantages of "backed" plates. The accompanying illustration is reproduced from the interior of a signal cabin as photographed on a Lovell Backed Plate. The subject is perhaps as difficult a one as could be imagined, as far as the avoidance of halation is concerned. As the unretouched "unfaked" print shows, the Lovell backed plate proved fully equal to the test. Apart from the avoiding of halation, the remarkable amount of detail in the shadows and in the view seen through the window under the glare of the open sky should not be overlooked. After such a test as this there can be no excuse for harsh contrasts in interiors or halation in-doors or out-of-doors, except where desired for pictorial effect.

We congratulate the Lovell Dry Plate Manufacturing Company upon the effectiveness of their plate.

---

RED sable brushes of good quality, such as Reeves' Nos. 1 and 2, give the best results, as well as the most satisfaction, in spotting negatives. For rougher work, such as blocking out, the cheaper crow's quill brushes are recommended.

PERSULPHATE of ammonia, in solutions of 1 per cent. or weaker, is sometimes effective as a clearing bath for stained or veiled negatives.

## THE EVENING SUN, MR. BERNARD SHAW, Etc.

THERE are none so blind as those who will not see. The editor of *The Evening Sun*, New York, is apparently much exercised by the claims made in behalf of photography as an art, and having determined that photography is not an art—whether it is so or not—has set himself the task of sweeping back the sea of sensible opinion with the broom of prejudiced self-assertion.

The article republished from *The Evening Sun* in our last issue, as well as that accompanying this note, will suffice to display the sort of stuff with which our otherwise astute contemporary seeks to mould public opinion on the subject. It is remarkable that so able a journal should lend itself to so fatuous an effort as is here involved. To the impartial judgment it is plain beyond dispute that there is as much art in photography as in painting, sculpture, or any other "art" by which men seek to express ideas or facts, sentiment or emotion.

We have neither explanation nor apology to offer for the statements made by certain writers in recent publications concerning photography as an art. Their opinions are probably as worthless as those printed in the editorials of *The Evening Sun* touching the same topic. Fortunately, photography as an art rests upon work rather than words. If the writer of *The Evening Sun* editorials will look about him he cannot fail to perceive that photography has produced not one but many pictures which abundantly exhibit the qualities ordinarily required in "works of art."

"Those persons," says *The Evening Sun*, "who admire the 'work' of certain Fifth Avenue photographers because they succeed in making their photographs look like reproductions of paintings will be surprised and pained to find Mr. Bernard Shaw insisting in the *Amateur Photographer* on a different test of excellence. Says the courageous critic: 'Nobody can take three steps into a modern photographic exhibition without asking himself, amazedly, how he could ever allow himself to be duped into admiring and even cultivating an insane connoisseurship in the old barbarous smudging and soaking, the knifing and graving, rocking and scratching, faking and forging, all on a basis of false and coarse drawing, the artist either outfacing his difficultles by making a merit of them, or else falling back on convention and symbolism to express himself when his lame powers of representation break down. In this year's exhibition I find two portraits of myself—one in the Salon by Frederick Evans, the other in the New Gallery by Furley Lewis. Compare them with the best work with pencil, crayon, brush, or silver point you can find—with Holbein's finest Tudor drawings, with Rembrandt's Saskia, with Velasquez's Admiral, with anything you like.' Of course, it must be admitted that Mr. Shaw has an advantage over the average man or woman when he sits for his photograph. In his ideas, as well as in every relation of life, he is a person of infinite nerve. So he is not rattled when the rest is placed against the back of his head. He is entirely at his ease, and the 'artist' of the camera is able to get the best results.

"Apparently Mr. Shaw's objection to painting lies in this, to a certain extent, that he does not approve of the artist, the artist's ideas being more important than the subject, the person for whom the picture is made, and who pays the bill. He does not want to have the serene intellectual beauty of his countenance lost on somebody who wishes to depict his (Mr. Shaw's) soul rather than his face. As for the inability of the camera 'artist' to reproduce color, Mr. Shaw doesn't object to that. Perhaps he is willing enough to avoid having emphasis laid upon the red beard with which his chin is adorned. If the 'art and photography' people can get any comfort out of Mr. Shaw they are welcome to it. But he does not say that photography can be 'art.' He says that it is better than 'art,' a very different thing. And still the old difficulty remains. It is impossible by any combination of circumstances for the man who presses the bulb of a camera to get his own brains and imagination into the picture received upon the plate inside. So photography is just photography, whereas art is art."

# F. DUNDAS TODD.

F. DUNDAS TODD.
From a photograph by J. M. Appleton, 1901.

WE republish herewith from *The Inland Printer* an appreciative sketch of our co-worker, Mr. F. Dundas Todd, who well deserves all the good things said concerning him—here and elsewhere :

The development of illustration methods in the past twenty years has brought into the field an army of artists that is enormous, compared with those of the days of the woodcut and the steel engraving. While

photography is the basis of each process, its use in producing a printable plate has not necessarily made photography an art, but the artist has turned to photography, and made it a medium through which he can produce a picture that can be reproduced in print.

Mr. F. D. Todd occupies a unique position in the art of picture-making with the camera, as well as that of technical photography. He came from Scotland some nine years ago, where he had given considerable attention to technical and artistic photography, and about 1893 became editor and publisher of the *Photo-Beacon*, a journal of photography that has, under his guidance, become more than national in its circulation, and is exercising an ever-increasing influence in the photographic world. Mr. Todd is essentially a teacher, and his strong and forceful manner of viewing things, and his fearless assertion of the facts that present themselves to his mind, have made him at once admired and respected by not only those who have the advantage of knowing him personally, but those who have read his criticisms and comments, from his condemnation of a time-honored but false practice, to his simple demonstration of a better and more modern process for obtaining the same results. This innate force that controls and directs his work gives him many of the qualities of the apostle, but he is always ready to prove his statement by a practical demonsration.

Some years ago Mr. Todd found that the pages of his journal were all to few to allow full scope for his teaching habit, and he commenced a series of books on photography, which have run into the 60,000 edition list. Mr. Todd has just placed upon the market a book entitled *What Are We Here For?* that deals with the problem of living, written as a sort of recreation, as Laurence Sterne wrote *Tristram Shandy* between sermons.

Mr. Todd's personality is complex. He is Scotch, therefore he is aggressive. His logic, like his speech, is clear, concise, and positive, with an artistic nature that makes him something of the clear analyist and dreamer in one. He is a man of epigrams and definitions. He separates technical photography and picture-making; the one is a "record of an event," the other a photograph, "which leaves something to the imagination." He says "the West is big, but not bigoted." He believes that in photography, as in most other things, it is "the man behind the gun," and to prove it, offered himself as a subject to a large number of portrait photographers, East and West, and published the results in the *Photo-Beacon*. No further argument was needed.

While not perhaps apparent, it is probably true, that even the art of making half-tone plates in the shops of the country has been indirectly but no less materially advanced by the wide-spread teaching of this editor, photographer, and author, and that he has benefited his kind by making "two blades of grass grow where one grew before."

---

A FEW years ago fairly cheap frames, of unstained oak, were fashionable; nowadays the oak must be "ebonized"—stained to a dark-brown, or black. To blacken a frame it must be thoroughly dry and slightly warmed. It is then brushed over with a stain made by dissolving one ounce of walnut shucks in six ounces of water. To extract the stain from the peel the water must be boiled and well stirred. When this extract is half dry on the frame brush it over with a solution of one part bichromate of potash in five parts of water. When quite dry it may be polished, or if preferred, oiled. Weak solution of bichromate of potash applied without the previous walnut extract gives a fairly successful walnut stain. "Ancient oak" is got by brushing the wood over with a solution of strong liquor ammonia.

A 2 OR 3 per cent. solution of persulphate of ammonia, thickened with a little glycerine or gum solution, makes a convenient and efficient reducer for local reduction.

EQUAL parts of commercial gold size and benzole make an excellent cold varnish for negatives, which gives a surface ready for the retouching pencil without further preparation.

## THREE PORTRAITS BY SPELLMAN.

THE true craftsman always finds pleasure in seeing what his fellow-workers are doing, especially when the work seen comes from one who is known as a "progressive." Those who have watched the growth of Mr. D. D. Spellman, of Detroit, during the past few years have doubtless observed that he shows much promise in his portraiture. The examples here reproduced, as well as the charming portrait given among our supplements, give us a glimpse of his current work. They are marked, as all Mr. Spellman's work is marked, by the individuality of the subject, which should always predominate in portraiture. We are glad to offer them to our readers as examples worthy of study.

Mr. Spellman opened a new studio a few months ago, and is now equipped to meet requirements of the fine patronage he has built up by his excellent work.

His growth has been marked during the past year or two, and he well deserves the success thus far attained. More power to his elbow.

*The "art quality,"* which is so much spoken of when referring to the work of some photographers, seems to be an illusive thing which some men cannot understand. This is not to be wondered at, for many very able men grope for a long time before they begin to grasp the subject. But there is no excuse for mediocre or poor printing, and photographs often come to the editorial desk which leave much to be desired in this respect. Especially is this so when attempting the beautiful (and not really difficult) carbon process. If those who stumble in matters of printing would read *carefully* the last number of *Mosaics* they would find the way to better work.

# A PRACTICAL NOTE ON THE PLACING OF THE FIGURE.

BY REV. F. C. LAMBERT.

Illustrating "A Practical Note on the Placing of the Figure."
By REV. F. C. LAMBERT.

To those readers who do not happen to be familiar with the phraseology of the painter's studio, it may be helpful to explain that by the placing of the figure is meant selecting the position and proportions which are to occupy the canvas. The portrait painter usually gives this matter very careful thought, and at times several positions are sketched before the final one is selected. The matter is of considerable practical importance, because it is one of the means whereby the artist is able to give vent

to his own individuality and style. Moreover, it is a means of emphasizing or suppressing certain qualities in his sitter. Roughly, then, we find that it in part—but only in part—corresponds to the trimming of the print in photographers' parlance. Thus, by a few trimming experiments we can in a simple and practical way test and exemplify some of those principles which are abundantly familiar to the painter. A glance will suffice to tell the photographer that the four illustrations accompanying this note are all from prints from one and the same negative. The difference is simply a matter of different "placing" by means of alteration of trimming. The prints are all of the usual cabinet size, Now, as the eye quickly passes from one to the other, we at once see that the background space between the top of the head and top of print is less and less. And as this space gets less so the figure seems to become taller. The upper left figure gives one the idea of a short person, but the lower right figure seems to be too tall for the print. The position of good balance and proportion is best seen in the lower left. In the lower right the figure seems too big for the available space. In the upper left the space is too big for the figure. Here all our interest is in the lower half of the print, and instinctively we seek to cover up or cut away some of the top-heavy but vacant space above the head. In a somewhat similar way one is prompted to cover up or cut away some of the figure in the lower right portrait.

One need hardly point out that in two of the prints the figure is placed centrally —*i. e.*, there is about an equal amount of background space before and behind the figure. The result of this is that the figure seems stationary—movement is not suggested. But in one the figure is much nearer the left-hand margin—*i. e.*, there is more picture space behind than in front of the figure. This seems to suggest that the figure is advancing—*i. e.*, moving—toward the left side of the picture. In the lower left the opposite arrangement prevails—that is to say, there is more picture space before than behind the figure—and consequently the result is a suggestion that the figure is receding—moving backward toward the right-hand side of the picture space. In the upper right the background space is somewhat too large, and seems to overpower and dwarf the figure somewhat. In the lower left the proportions occupied by the figure and the background seem to be fairly satisfactory, and in this respect is the most satisfactory of the four arrangements.

And now a word or two with regard to the amount of figure included: First comparing the two upper portraits, we shall probably vote for the left figure as being more pleasing than the right figure. In the second the print cuts the figure just above the wrist, and this is a quite uncomfortable suggestion. It is a case of more or less arm to be shown. In the same way a standing figure cut between the knee and foot gives a most uncomfortable suggestion. Comparing the second and third figures, our preference will be for the second. But here again the margin cuts part of the hand, and this is not quite comfortable. We see this better by comparing the third and fourth figures. Thus, so far as the length or amount of figure to be included, perhaps the order of preference would be fourth, first, third, second. This, of course, only applies to where the margin of the print cuts the figure.

It must now suffice to say that in photographic portraiture, if one may judge from the home specimens, the showcase, and the reproductions in our journals, there seems a great tendency among the majority of workers to imitate each other rather than to originate fresh treatment. This in turn is probably due to at least two if not more causes: first, the number of negatives made in a week or a day; secondly, the rarity of anything like independent study—study of good painting and study of one's own efforts, the latter taking the experimental direction. Probably all in this note is abundantly familiar to most readers of these pages. That matters little if only it serves to stimulate some readers to make a few careful studies, thoughtful experiments, in some well-known direction.

---

*How to Enjoy Pictures* is a book full of hints and suggestions for the picture maker as well as enjoyment for the picture lover. Price $1.50 postpaid to any address.

# PROFESSIONAL PHOTOGRAPHY AT THE LONDON EXHIBITION.

At the exhibition of the Royal Photographic Society in London there is a special section devoted to professional work. Having in mind the similar display at Glasgow, which I have already described, I was a little curious to see how London compared with its northern neighbor. But, whereas, in Glasgow the best men pulled together, with an ambition to show the high-water mark of the city's progress, in London the exhibition has no special connection with the best-known photographers —nor, in several instances at least, with the best work. I imagine that wall space has been to let, and that the offer of it has been accepted by several photographers desiring to advertise their business. So almost from the outset I found it necessary to confine myself to desultory remarks rather than to any connected criticism of the works on show. What is known in America—and in Britain—as the R. P. S. exhibition is this year a fine collection of some 400 photographs, selected by a jury, and hung in one large room. Adjoining this room are two smaller ones—one of them some twenty-five feet square, the other somewhat larger—in which these professional exhibits are hung, the selection of the pictures and the arranging of them being presumably left to the photographers themselves.

Entering the south room I found a display of the work of Furley Lewis. Mr. Lewis is doing work which is making his name widely and favorably known, and several of the twenty pictures hung here are again hung in the main exhibition, having received the approval of the judges. His pictures range in size from cabinet to about 11 x 14. Except for the two largest, which he frames close in a strip of one and half inch dark wood, he favors a dark-gray mount and a plain frame of half inch wood finished in black. His pictures are marked and then trimmed to show about one-twelfth inch margin of white, apparently to relieve the black platinum against the dark gray of the mount. The slight unevenness incident to masking and trimming causes a considerable variation in the width of this narrow binding line. There is just enough of this uneven line to be irritating, as though the line were some optical illusion with a suggestion of vibratory width, or some test for astigmatism in the eye of the beholder. And there is not enough line to help the picture. The prints themselves are orthodoxly placed on the mount, centrally from side to side, with a rather broader band of mount showing above and a still deeper one beneath the print. The mount is very quietly blind blocked, a cushion-shaped die about one inch broad by half an inch deep pressing down the mount and leaving the letters F. L. raised, and on either side, a fleur-de-lis. Plain dark backgrounds are the rule, and some of the lighting and posing is very good. The women all suggest "studies" rather than commercial photography; and two or three of the men are frankly so. The rule of letting the man pose himself is to a certain extent carried out in these pictures—in one or two cases rather aggressively so. There is a thought which is often strongly forced upon me, and which is very slightly hinted at in this present display, that many photographers use platinum more because it is fashionable and sells on its basis of permanent than because it is one of the most beautiful of processes. How few photographers may be considered as really *masters* of platinotype printing.

"F. & R. Speaight, miniature painters and child photographers to the Royal Family," have a display of the work which is their specialty. Richard N. Speaight is the operator, and he has a great reputation for his portrayal of children. He is eminently the fashionable photographer, taking juvenile royalty by the dozen, and "the nobility and gentry of this highly favored district" in shoals. His pictures are platinotype, toned slightly warm, with a rich quality of finish, mostly in small sizes and trimmed with a one-twelfth inch white margin. They are mounted on a plate-sunk cream mount of an appearance like vellum. These mounts appear to be stocked in various sizes of centre, so that

by a little compromise all round—choosing the nearest size, making a slight variation in the trimming and in the amount of centre left uncovered—trimming can to a certain extent be indulged in. These mounts are plainly framed in half-inch or one-inch dark wood. Speaight seems to almost invariably make his figures light against a dark background, and he certainly does not flood his pictures with light. The pictures seem to please the customers, partly, doubtless, because the photographer is fashionable and "under the highest patronage," and partly because it is sound concientious work, of a better grade than the average child portraiture. But the little figures are meekly submitting to the ordeal; there is none of the abandon of childhood, nor is there the slightest suspicion of *inspiration* in any of the pictures.

After examining the work of these two firms with considerable interest I took a general stroll round the two rooms and saw that the Royal Society had no hand in the *selection* of the professional exhibitions. Some of the exhibitors seem to have travelled just so far along the road as to use platinum paper because it is fashionable, and to avoid retouching in the interests of art. And very emphatic was the innocence of any unity between the different parts of a picture; no idea of the completeness of a single whole. As it has been, so it is; the figure is one item and the background another, as much as though there were two pictures—a figure superimposed on a background. There are just two planes, the figure occupies one and the background one, and, taking due note of the absence of atmosphere, there is "space" between them.

There are several good portraits by S. C. Turner and Ralph W. Robinson, and a large display by Langfier, who evidently believes in the value of the publicity gained by lavish exhibition. But his work has already been so fully referred to in WILSON'S that I made note merely of a few frames enclosing colored miniatures. Several of the frames are of plain burnished gold, and some are a string of gems. Pearls, emeralds or amethysts, a single string of them circle the picture with rich effect. And enamel frames seem common. All these frames are plain, lacking any undue elaborateness. The enamel frames consist of a single ribbon of green or pale blue, or dark red, bound on each side by a narrow thread of white or a band of white with colored threads. The miniatures themselves—colored—must appeal strongly to wealthy customers, as they here appeal to the spectator. The most extensive of these exhibits in the professional section are the displays of trade enlargers. These firms, who specialize on large carbons, bromides, etc., seem to be necessary to the English photographer, and do almost the whole of his work of these kinds. The trade displays are mostly devoted to the technical rendering of portraits or pictures in various shades of carbon tissue. Several of the exhibits are from the cameras of ladies, and there is one very ornate show by a "photographer to the king."

As I have said, this work is not confined to London's best men. Were it representative of what they were doing it would be a discouraging show. There is such a lack in much of it of any evidence of striving after any tangible ideal. One can so readily imagine some of the workers as feeling very comfortably satisfied with what they are doing. But there is no exhibition in Britain which is adequately supported by or representative of the profession. Even where well-known men exhibit at the R. P. S. in the main show they are apt to show work taken in the intervals of escape from the studio. Thus Warneuke has a delightful little out-door bit of frolicking children entitled "May," and Harold Baker has several very carefully handled interiors. H. Walter Barnett and Fellowes Willson have each a couple of pictures at the high-water mark of careful sound professional work on old lines, but these almost exhaust the list.

The British professional sadly needs a good convention with a live management and live support. Now that he has a professional association it may come, although there is no present sign of it; for the association, since the soap and cigarette firms withdrew their offers of free photographs, has laid low. One of his troubles appears to be a lack of intercourse with his fellow photographers, with a consequent lack of opportunity and encouragement to new blood. From this point of view the R. P.

S. is taking a wise course in hanging these displays, and if it can only get the *best* men to show their work and enthuse the country about it, they will give a much needed lift forward to the profession as a whole.

## THE PHOTOGRAPHER AND HIS CUSTOMER.

BY BARRISTER.

WHEN a person sits for his portrait to a professional photographer there arises an implied contract between the two which the law assumes, and which exists, though nothing at all be said on the subject by either of them. It is the same as that which arises between the attorney and his client under similar circumstances, the physician and his patient, or any other professional person and his employer. It is on the part of the one that he will use his skill and experience faithfully to his patron's benefit, and on the part of the other that he will pay for the same.

The photographer should bear in mind, then, that there are certain duties and responsibilities which he assumes in his professional relation, and with which he should be thoroughly familiar. An excellent illustration of the careful and discriminating restrictions which he must observe, and the safeguards which he must be constantly placing upon his professional conduct, is to be found in a certain case which came before the courts of the State of Minnesota not long since.

It was brought in Hennepin County before Judge Collins, of the Supreme Bench, on appeal from the lower courts, July 1, 1890, by Ida E. Moore, *vs.* A. B. Rugg, a photographer, and will be found reported in the forty-fourth volume of the reports of that State. The plaintiff in this case employed the defendant to take her portrait, and he had made and prepared for her a number of photographs of herself, afterward retaining the glass plate for future use, in case she cared to order further copies of the same print, as is the usual custom with photographers.

Some little time afterward a detective came to him and requested a copy of the photograph, which he accordingly made from the plate and allowed him to take, but without informing his customer of what he had done or requesting her permission or consent. The detective put the photograph to an improper use, and the lady whose likeness it was, with just indignation, brought this suit against the photographer, Rugg.

The Court, in delivering the opinion, said: "There is an implied contract between a photographer and his customer that the negative for which the customer sits shall only be used for the printing of such portraits as the customer may order or authorize." Judgment was given to the plaintiff.

Now, it should be further stated in explanation, that the photographer did what he did in the utmost good faith, not knowing to what use the photograph was to be put, and only desiring to oblige the officer to whom it was given; and this is the reason especially that the practicing photographer should take to heart the warning which the case contains.

Should he at any time commit this breach of the duty which he owes to his customer to perform, even though he do so unintentionally, and without any wrong purpose in mind, he is nevertheless liable to an action in which at least nominal damages can be recovered, even though no substantial loss or injury can be proved to have been suffered.—*The American Photographer.*

---

A COPY of *Photograms of the Year 1901* comes to our table just as we close this issue for press. In the hasty glance we have given the volume it impresses us as a decidedly better book than any of the earlier volumes, and one offering special usefulness to professional workers. The photographer who will carefully study its pages will gain thereby a full acquaintance with much of the best photography of the year.

# APPLICATION OF PHOTOGRAPHY TO LEGAL RECORDS.*

BY HENRY LEFFMANN.

THE transfer of real estate, under which term (disregarding legal hair-splitting) we may understand land and the buildings thereon, has always been a matter of some difficulty and complexity. In many times and places land was and is practically inalienable. Even now, in the most enlightened nations, the legal fiction is that all land belongs to the supreme authority—that is, the crown in such a country as England, and the State in such a country as our own. Upon this principle rests the right of eminent domain, which the State sometimes exercises in its own interests and sometimes confers upon corporations. Land being irremovable, the occupancy of it is not evidence of ownership, and it is impossible to conceal its existence. As it is the only natural monopoly, it is the foundation of all wealth in the strict sense of that word. If we carefully analyze the transactions of both nations and individuals we will find that a common impulse of humanity is that of land-grabbing, whether it be the conquests of a Joshua or a Cæsar, or the "benevolent assimilations" of our own age and country.

The enlightened nations of the present day differ considerably as to the amount of land transfer and the methods of it. We are so accustomed in this country, and especially in this city, to the public record of deeds, mortgages, and judgments, and to the publication of names of sellers and buyers, and even of delinquents, that we are surprised to learn that this is not by any means universal, and in some places quite against the will of the community. Some notable contrasts are also to be found among what are considered happy countries in regard to the distribution of land ownership. Thus it is stated, on good authority, that the average number of land transfers annually in France is about 800,000, while the total number of land owners in England is only about 200,000, so that for England to have as much conveyancing business as France would require that each English owner would make transfers four times each year.

In Philadelphia the exact extent of the business is not easily obtainable, but by inquiry at the office of the Recorder of Deeds I learn that in the record work about 400 books are filled each year, each book containing 560 pages of the size of the large counting-house ledgers. This will make nearly 250,000 pages per year. These books contain principally deeds and mortgages, about equal number of each; releases, power of attorney, and some other documents affecting property make up the remainder. To make these copies, which are expected to be word for word, a large force of transcribing clerks is maintained.

Mr. J. W. Ridpath kindly ascertained for me the statistics of two of the adjoining counties for 1900, as follows:

Montgomery County, 5548 documents, 12,000 to 14,000 pages.

Bucks County, 2684 documents, 5210 pages.

Another very important record department is that of the Register of Wills. In this city, and I believe generally, it is the rule to preserve the original document and furnish to interested parties a certified copy. The original may be seen by anyone. These methods are obviously open to the same objections that apply to the transcription of deeds and mortgages, with the additional one that as the original is open to inspection it may be liable to injury. The number of wills registered in Philadelphia in a year is considerable. A lawyer of this city told me that a will was filed not along ago in a city of western Pennsylvania, of which three official copies were furnished by the Register's office, and all the copies differed, although all were duly certified as exact.

It must be apparent to everyone that transcriptions by hand are at best clumsy. The Philadelphia departments are in good repute with attorneys, but even under the most favorable circumstances there is considerable delay in the recording of an instrument. This does not operate to the

* A paper read before the Photographic Section of the Franklin Institute, Philadelphia, October 3, 1901.

disadvantage of parties, since the instrument takes effect at the moment it is presented for record. The possibilities of error in transcription must always be in mind, although here, again, there is less risk, because the original document is returned to its owner, and this document is, of course, always the best evidence.

Some countries have adopted a plan by which the original document is deposited at the registry office, but this method is in vogue to only a limited extent, and even it is not free from objection.

When the systems of transcription were inaugurated the possibilities of photography were not only unknown, but were quite unsuspected. At the present day the art of duplication of writing or drawing has been brought to a high degree of perfection. Several methods are known by which such reproduction can be accomplished rapidly, accurately, and cheaply. Nor is the work confined to the copying of well-made originals, consisting of black lines on a white ground; even old yellow manuscripts on parchment can be reproduced with vividness not appreciably inferior to the originals. As some of those present will remember, I exhibited at a former meeting a fine sample of this class. Lead-pencil writing on common white paper can be well reproduced.

Briefly, I propose that for all documents which are to be copied for record a negative shall be made either of full size, or somewhat reduced, if thought permissible, and from the negative prints shall be made by the best processes. The negatives are not to be kept, hence the same glass can be used a number of times. The paper must be of the best quality, especially as to its resistance to decay. There is nothing in the problem that is uncertain or indefinite. Photography of this character can be carried out independently of the weather or time of day; permanent pictures can be made and control can be exercised over the work at all points. With regard to wills, I propose that even if it be thought necessary to keep the original document the public should be allowed access only to the photographic copies, which should be bound in indexed volumes. To facilitate the work some method of drawing up legal documents may be laid down, such as standard size of sheet, character of ink, and other details; but I am informed by an attorney that recording officers would, under present laws and customs, probably be obliged to accept for record any legible document, so that very close requirements would probably be impracticable at first, and as far as wills are concerned, of course impossible. However, whatever the eyes can read the camera can also read, and there will be no practical difficulty on this point.

Mr. Getty, of the International Engraving Company, has kindly made a full-sized copy from a mortgage loaned me by an attorney of this city. The original is about thirteen years old, and hence presents some greater difficulty than a fresh document; but, as will be seen, the result leaves nothing to be desired. In fact, the attorney who loaned the document mistook the copy for the original.

## GENRE PICTURES.

BY ROBERT MELVILLE.

A CONSIDERABLE number of photographers make an occasional essay into the rather difficult subject of genre. It is an interesting study, and it is one which is to many people not a little helpful. A few firms—the best known of which are, perhaps, the Baker Art Gallery and the F. Ullman Company—have turned this branch of work to great commercial account, producing pictures of that somewhat sentimental nature which appeals to so large a majority of people. Occasionally a firm as Knaffl Brothers, will run on some one specialty and win a wide reputation and good cash by it.

But there is room for a wider application of this special branch of work—not necessarily for publication, but as a matter of education. Too many photographers are content—in some cases necessarily so—to confine their efforts to the photographing of their customers in the studio; but all

work and no play is bad, and the man who too closely follows one line of work is likely to get his ideas narrowed.

Some few years ago an enterprising firm sent a number of their cameras—five-dollar ones, I believe—to the Convention, and nearly every photographer bought one "for the fun of the thing." This was a practical carrying out of Mr. Tennant's suggestion that the professional should become an amateur occasionally for his own good.

I think genre subjects are of educational value—and here I write for the younger men—because the work is not easy, requiring thought and skill and a certain amount of art knowledge. A genre picture is not made by merely bringing together a number of subjects or objects, either out of doors or in an interior setting. A genre picture cannot be made on the ground-glass after the group has been arranged hap-hazard. It must first be seen in the eye, and when fairly visualized these may be worked out with the aid of a model or models. Its great value is that by concentrating the thoughts for a while upon one picture the picture is understood, and examined, and analyzed. One of the most helpful branches of work for those who feel at sea regarding the necessary requirements of a good picture is to make an *imitation*, as faithful as may be, of some well-known picture. In this it is very advisable to be content with a picture containing one figure only. In this method a correct composition will probably be obtained, and by the time that a few pictures have been successfully copied it is probable that the photographer will have an inkling as to why that special attitude, and accessory, and trimming have been resorted to by the artist. One of the best known of English photographers, William Gill, years ago spent many pleasant hours in arranging studies of the work of artist "masters," imitating not merely the pose but the draping, and drapery, and accessories of the originals. At the same time, helped by graceful and willing models, he was busy on original genre work, for which he not only conceived pose and subject, but also designed and himself constructed the entire setting, down to the smallest detail. I quote this instance of a foreign photographer because William Gill now handles his many handsome customers in a special and distinctive way, which is a direct outcome of his genre studies, original and imitative.

It cannot be too carefully remembered that mere copies or imitations are correctly described by that much misused word "studies." And they are for education only, not to be shown except privately to friends. In making genre pictures for the public, the first consideration should be simplicity and—if it is not too absurdly paradoxical—truth. We have in the past seen many studies of scenes of by-gone ages, the clash of armor, the poetry of romance. But the "photograph" part of it is so strong that it inevitably ruins any chance of success. The best models are those familiar with the subject to be rendered. The best occupant of a smithy is a real live smith (this subject has been overdone). The best children at play are real children, really at play.

And it need not be forgotten that the best class of genre work is practically a dead factor at present, and that a genre picture which is, pictorially, a complete success (very few of them have been seen) may not only bring a measure of fame but also of money to its producer.

# EDITOR'S TABLE.

*Anthony's International Annual for 1901.* 350 pp. Illustrated. Paper covers, 75 cents; postage extra, 15 cents. E. & H. T. ANTHONY & Co., New York.

*Anthony's Annual* has made a prominent place for itself among the photographer's year-books by its generous supply of useful information and interesting pictures. The volume before us is undoubtedly the best of the series, a remarkable book, considering its cost. Its articles are well chosen to interest both amateur and professional photographers, and the process-worker has a section especially devoted to his work. Among the full-page illustrations we note examples of portraiture by J. Will Kellmer, W. N. Brenner, Eddowes Bros., B. J. Falk, Geo. P. Hall & Sons, Alfred Holden, W. G. C. Kimball, A. Langfier, W. H. Partridge, F. G. Schumacher, D. D. Spellman, J. C. Strauss, Geo. E. Tingley, and others of equal repute.

Mr. W. I. Scandlin, as editor of the *Annual*, deserves the highest praise for his thoughtful and enterprising effort to surpass all previous records in the making of year-books, and the publishers have apparently left no stone unturned in presenting the volume as attractively as was possible.

---

WE have had several complaints of late concerning the rapid deterioration of the fixing bath. It is possible that the present low price of hypo-soda oftentimes means an impure product. The remedy is to use hypo of standard quality, such as the famous Walpole Hypo, made by the WALPOLE CHEMICAL CO., Walpole, Mass. This is an American product, and can always be relied upon.

---

THE BLAIR CAMERA CO., of Rochester, N. Y., has prepared an attractive booklet setting forth its special offerings of Hawk Eyes for holiday gifts. There are few holiday presents equal to a hand camera as pleasure bringers, and our readers are advised to see the Blair booklet before choosing their gifts.

---

ONE of the brightest and most interesting of our new exchanges is Hyatt's *Photo-Mirror*, published by H. A. HYATT, St. Louis, and edited by Mr. HARRY H. HYATT. Those who have not seen it should write to Mr. HYATT for a specimen copy. It is well edited and profusely illustrated with the latest photographic novelties.

---

THE A. M. COLLINS MANUFACTURING CO. send to our table specimens of their new holiday mounts, the *Lorenzo* and *Marquette*. These are unusually attractive in quality and price, and should not be overlooked in the search for specialties likely to help in drawing holiday business.

---

AMONG portrait outfits we know of nothing to surpass the Model Outfit offered by JAS. H. SMITH & CO., Chicago. The photographer who can afford to make himself a New Year's present of practical and everyday value should see the description of this famous outfit on another page.

---

THE *Photo-Pivot* for November-December comes to our table from RALPH J. GOLSEN, 82 Wabash Ave., Chicago, full of lively information put in a lively way. It gives us the impression that Mr. GOLSEN does a big volume of business on the basis of small profits and quick returns.

---

E. & H. T. ANTHONY & CO., 124 Fifth Ave., New York, ask us to announce that they have equipped a very complete carbon printing establishment, and now undertake all classes of carbon printing for the trade. The price list sent by Messrs. ANTHONY & CO. explains their facilities and rates very fully, and should prove of practical interest to all professional workers.

---

THE American School of Art and Photography, of Scranton, Pa., announces a special course of instruction in retouching, by correspondence, for $5. This course is offered as an introduction to the School's methods of teaching, and should prove useful to photographers who cannot leave their studios for personal instruction.

---

THE Philadelphia Photographic Salon fixed its opening date somewhat later than usual this year, hence we are able to present only a brief review of its attractions in this issue. A detailed notice of the professional work will appear later.

The Salon this year is under new management, and the result is a broader and more generally attractive exhibition than was presented last year. We are especially pleased to see that a few professionals of note have submitted examples of their work, and have secured a place on the walls. It is evident, also, that the work of the new school of pictorial photography has influenced the amateur field in a large measure, this influence tending toward refinement of method and better—*i. e.*, more artistic results.

The exhibition is remarkable for the considerable portion of foreign work accepted. This is commendable, as it gives the American amateur or professional an opportunity to see what is being done abroad, and to compare his achievements with the selected work of men and women often mentioned in the magazines as worthy of emulation.

The display comprises 281 prints, and the range of color is very pleasing compared with the universal gloom of sadness of the walls at the Salon of 1900. We are glad to see that our photographers are beginning to appreciate the fact that life is sufficiently dull and gray in itself, without this sentiment of sadness being permitted to permeate the art which primarily sprang from the glorious sunlight.

The Salon will be open until December 14th, at the Academy of the Fine Arts, Philadelphia. We urge all our readers who can make the effort to visit and enjoy the many lessons and pleasures provided by the exhibition.

---

MR. G. GENNERT has just placed on the market a new trimming-board with several advantageous features. This and other trade novelties will be dealt with in the January number.

---

NEGATIVE paper is the latest substitute for glass plates. It is introduced by the ROTOGRAPH CO., 101 Fifth Ave., New York. We hope to report upon its performance in our next issue.

# BEGIN THE NEW YEAR RIGHT

BY RENEWING—TO-DAY—YOUR subscription to "WILSON'S" for 1902. A glance over this number and the Index accompanying will remind you of the splendid investment you made by subscribing for the volume now ended. Compare the return "WILSON'S" has given you with what you have received from any other photographic journal. Weigh things, and measure their worth by the help, inspiration, pleasure and encouragement the journals you take have brought to you. Consider for a moment the amount of practical information "WILSON'S" gives you month by month; the quality of its information; the interest of its pictures. Count the cost, 25 cents per month, and you will agree that as an investment

# WILSON'S

# PHOTOGRAPHIC MAGAZINE

is the most profitable because it is the most interesting and the most useful. You need it in your business as a help to success.

*Price, $3.00 Per Year. $1.50 for Six Months*

EDWARD L. WILSON, 287 FOURTH AVE., NEW YORK

## WANTS AND SPECIALTIES

If you have anything to sell, or want to buy anything photographic, put your advt. on this page. Rates, 25 cents per line of seven words, all counted. Cash must accompany order. Reduction on three or more insertions. Copy must reach us before 15th of each month. We cannot undertake to mail replies in any case. Assistants seeking positions may advertise without charge.

### RENEW YOUR SUBSCRIPTION

We wish everyone to see pictures colored with **Oil Photo Tints,** and if they do not wish to use them send us their work. Tinting sample cabinet, 25c. MORTON PHOTO. PAINT CO., Birmingham, Ala.

### DON'T FAIL

to secure "WILSON'S" for 1902

**FOR SALE** Leading Chestnut St studio, best location in Philadelphia. Established 15 years. Spacious rooms and very large light. Every facility, and all appointments first-class. Address, Room 408, 108 E. 22d Street, New York City.

### A GALLERY OF PICTURES

and how to enjoy them

Get MISS EMERY'S book on

**HOW TO ENJOY PICTURES**

*Price, $1.50, post-free*

E. L. WILSON, 287 4th Ave., New York

**WANTED** A1 operator; a man who is up-to-date and a good retoucher. None but first-class men need answer. B. H. BINGHAM, 281 Main st., Memphis, Tenn.

### PHOTOGRAPHY AS AN ART

BY C. H. CAFFIN

Superbly Illustrated. Just out

*Price, $3.00, post-free*

E. L. WILSON, 287 4th Ave., New York

**IMPORTANT** Mr. Hollinger will gladly replace the four pictures taken from his exhibit at Detroit with others equally good. Exchange will be made and no questions asked if present holder will return them to E. B. CORE, 572 Fifth Ave., New York.

**FOR SALE** The Littleton View Co. (makers past 17 years for Underwood & Underwood) will sell their Stereoscopic View business, with or without factory, to close the estate of the late G. S. Bellows—a bargain for some one. Address, WM. H. BELLOWS, Executor, Littleton, N.H.

**FOR SALE** Finely equipped studio. Paying business. Best location. Might rent. Address, "Box 464," Meriden, Conn.

### OLD PHOTO-BOOK BARGAINS

X. Y. Z., care this MAGAZINE

### SITUATIONS WANTED.

Operator and retoucher and strictly first-class all round man of 15 years' experience will be open for engagement after December 1. Address, Pyro, 1112 Lehman st., Lebanon, Pa.

By good all-round man and Carbon and Platinum printer. First-class studio. Best of References. Address, 1.2.3., care Appleton's Photo Studio, Fifth Avenue, New York.

### ELECTRIC LIGHT WATER COLORS

**Portraits, Landscapes, Flowers, Carbon Miniatures. Window Transparencies, Lantern Slides**—Every kind of Picture easily and artistically colored true to nature.

Colors are *not* liquid dyes. Ten times stronger and vastly superior to any others. Used by Mr. Marshall in coloring the slides for Alex. Black's famous "Picture Plays," Lieut. Peary's Arctic series, C. D. Kellogg's marvellous "Bird Carnival" and hundreds of others.

PRICES:

| | |
|---|---|
| Set No. 1. for gelatine and platinum surfaces | $1.00 |
| Set No. 2, for albumen and carbon surfaces . | 1.00 |
| Both sets complete (13 colors) . . . . . | 1.50 |
| Special medium for collodion surfaces . . | .25 |
| Single colors . . . . . | .20 |

A. G. MARSHALL,

625 Vanderbilt Ave., BROOKLYN, N. Y.

### THE BEST OF XMAS GIFTS

*A Year's Subscription to "WILSON'S"*

If you are not _____

You should use the finest paints made

***Morton's "Oil Photo Tints"***

Give soft, beautiful effects so much desired now. Use them and do permanent coloring, thereby securing patrons and making money

**MORTON PHOTO PAINT CO.**

BIRMINGHAM, ALA.

### 80 FINE ENGRAVINGS

Many Practical Papers on

Everyday Photography

**MOSAICS, 1901**

FIFTY CENTS, POST-FREE

E. L. WILSON, 287 4th Ave., New York

### PRINT YOUR PHOTO MOUNTS

WITH A HAND PRESS AND EMBOSSING DIE.

With Adjustable Gauge.

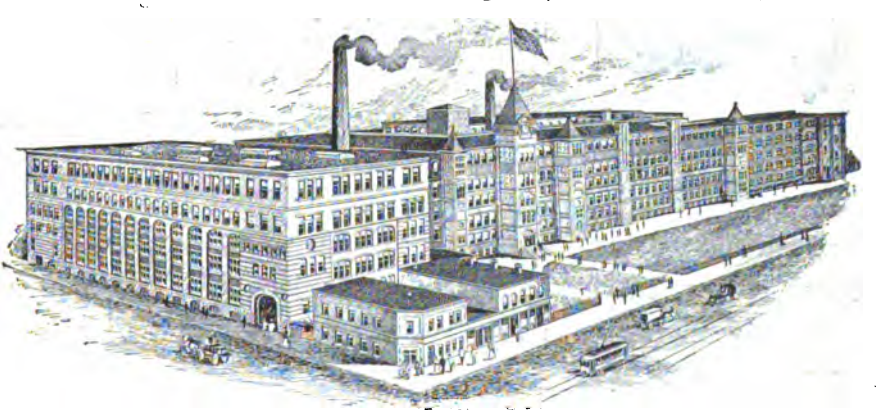
FOR PRICES AND STYLES OF DIES, WRITE TO

N. W. STAMP WORKS, St. Paul, Minn.

# Plastigmat f-6.8

## HISTORY

Plastigmat f-6.8, the Perfect Photo Lens, was designed because in all other symmetrical anastigmats there are inherent defects which seriously interfere with their usefulness. Plastigmat f-6.8 is longer focus, giving superior pictorial effects, of absolutely transparent glass, giving greater speed. Nothing but permanent materials are used. The mounting is the most compact, fitting it for the smallest folding cameras. The lenses are far enough apart to take any shutter.



Manufactory of Bausch & Lomb Optical Co., Rochester, N. Y., where Plastigmat f-6.8 is made.

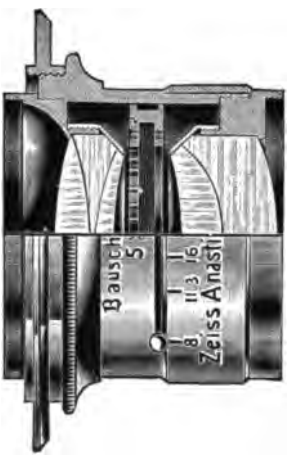
It will fit any camera. The optical corrections are of the highest order. The front or back system may be used separately for long distance or portrait work at snap-shot speed, giving results unapproached by any other symmetrical anastigmat. Ask your dealer for booklet of pictures free, or send to us.

## Bausch & Lomb Optical Co.

ROCHESTER, N. Y.

New York. Incorporated 1866. Chicago.

# Bausch & Lomb-Zeiss Anastigmat Series IIa.




Bausch & Lomb-Zeiss Anastigmat Series IIa. Actual size of 5 x 7 Lens.

The Zeiss Anastigmat Lenses (patented by Dr. Rudolph in all countries) are manufactured in America by the Bausch & Lomb Optical Co. only, the sole privilege of manufacturing under the American patents having been granted us by the patentees. The glass comes direct from the famous Schott works at Jena, and the formulae are the same as used by Zeiss. These lenses are made in seven series embracing the highest grade objectives for every class of photographic work. This month we wish to direct your especial attention to the SERIES IIa lenses. These objectives have an immense image circle and although of medium narrow angle on the plates for which they are rated, giving excellent results for all general work, the anastigmat corrections are so perfect that, with smaller stops they may be used on much larger plates, being when so used in effect wide angle lenses. They are in fact the best of the unsymmetrical anastigmats. The price is less than that of the Convertible or Plastigmat Lenses.

CATALOGUE FREE.

## Bausch & Lomb Optical Co.

Incorporated 1866.

ROCHESTER, N. Y.

# DIRECTORY OF RELIABLE MANUFACTURERS AND DEALERS

## ROUGH & CALDWELL,

**ART BACKGROUNDS AND ACCESSORIES,**

STUDIO

122 West 29th Street, NEW YORK.

---

**AIR BRUSH** Air Brush Mfg Co.

**FOR ART WORK.** Are making and selling the best art tools in use. Applies color by jet of air, enabling the artist to do the best work cheaply rather than to do cheap work. No studio complete without it. A good thing for an amateur. Circular free. Address, **AIR BRUSH MFG. CO.**, 50 Nassau St., Rockford, Ill., U. S. A.

---

**BARGAINS!!**

ALL KINDS OF PHOTOGRAPHIC APPARATUS — NEW AND SECOND HAND LENSES, CAMERAS, BURNISHERS, STANDS, PRINTING FRAMES, ETC.

LARGEST STOCK IN THE WORLD!

WE BUY, SELL AND EXCHANGE ALL DESIRABLE APPARATUS.

116 DESIGNS NEW BACKGROUNDS 116 DESIGNS

SEND FOR CATALOGUE

OIL — MONSTER BARGAIN LIST ISSUED EVERY MAY. — DISTEMPER

THE PHOTOPIVOT MONTHLY-15th OF EVERY MONTH

PLEASE SEND IN YOUR NAME FOR MAILING LIST. (FREE.)

COMPLETE PROFESSIONAL OR AMATEUR CATALOGUE ON APPLICATION

**RALPH J. GOLSEN** PHOTOGRAPHIC SUPPLIES AND APPARATUS OF EVERY DESCRIPTION

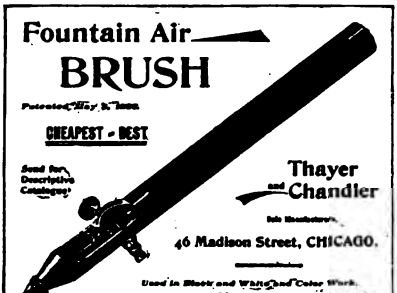
80 & 82 WABASH AVE., CHICAGO. ADDRESS DEPT. TELEPHONE (LONG DISTANCE) 1195 CENTRAL

---

Fountain Air BRUSH

Patented May 8, 1900

CHEAPEST - BEST



Send for Descriptive Catalogue

Thayer and Chandler

46 Madison Street, CHICAGO.

Used in Black and White and Color Work. Can be Used for Retouching Negatives.

---

**Eighty Examples**

of the best professional portraiture of American Studios

...50 CENTS POST-FREE...

Only a few copies to be had

**MOSAICS, 1901**

---

**STAMP PORTRAITS.**

**MINETTE STAMP PHOTOS.**

Territorial rights and outfits for sale.

**RIVAL LENSES.**

**PECK'S PNEUMATIC RETOUCHER.**

**MAGIC VIGNETTERS.**

**DIXIE VIGNETTERS.**

**H. A. HYATT,**

410 AND 412 N. BROADWAY, ST. LOUIS.

---

**ILLINOIS COLLEGE OF PHOTOGRAPHY.**

EFFINGHAM, ILL.

The Art Science of Photography taught according to the most approved methods, in the shortest possible time and at smallest expense. For full particulars and finely illustrated catalogue, address as above.

**HIGH GRADE PHOTOGRAPHY TAUGHT. Good positions secured for graduates.**

---

**BURNISHERS**

THE MODEL DUPLEX.

6 in., $ 7.50 8 in., $10
10 in., 12.50 12 in., 15

Every amateur should have one. Complete catalogue of Photo Goods, Tripods, Developers, Dry Plates, Cameras, Papers, Etc., free.

**JAS. H. SMITH & CO.**
**311 Wabash Av., Chicago**

Dealers supplied at manufacturers' prices.

---

**Photographers' Ads. Written**

by an advertising expert, doing business—bringing work for many studios—but only one in each city. Send me some data and $1.00 for two original advertisements, written expressly for you. Future orders are what I want.

**MORRIS WILLIAMS**

**110 Wyoming Ave., Scranton, Pa.**

---

**Packard Brothers**

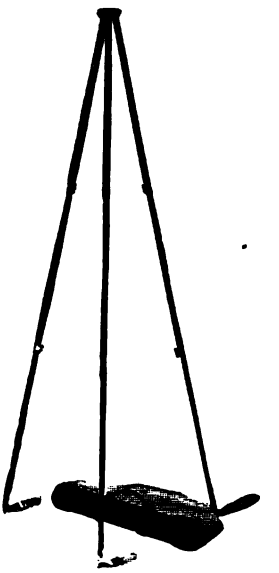
In business since 1882

**BOSTON, MASS.**

Write for 1901 Designs

**HIGH-GRADE BACKGROUNDS**

# THE UNIVERSAL STEEL.. TRIPOD



COMBINES extreme strength and rigidity with light weight, beauty and compactness. This tripod is made of tempered sheet steel, in three telescopic sections, and all hinged joints are riveted. It has no parts to warp and no wood screws to become loosened. It is provided with a patent adjustable head by which the camera may instantly be clamped in any required position without moving the tripod legs. This device is especially valuable when working on uneven ground or when pointing the instrument upward or downward for photographing high buildings or from great elevations. It is suitable for all hand, folding or regular view cameras. Its weight is only 32 ounces, its length folded only 20½ inches and height when open 55½ inches. Each section may be securely clamped at any height with perfect ease and without danger of the sections slipping under the weight of a heavy camera.

**Price, . . $3.00**

**Carrying Case additional, 75c.**

This is what Photographers have long been looking for. Don't fail to examine it.

FOR SALE BY ALL DEALERS.

**E. & H. T. ANTHONY & CO., Sole Agents**

**122-124 FIFTH AVE., NEW YORK**

# LOVELL BACKED PLATES

**Have all the speed of the most rapid plates on the market, but give incomparably better results in**

**STUDIO OR AT HOME PORTRAITURE**

**especially with light draperies**

**Landscape or Out-Door Work with Skies**

**THE BEST PLATE FOR SUMMER WORK, INDOOR AND OUT**

**Thousands of Photographers are Using**

# LOVELL

## COLOR DIFFERENTIATING

# PLATES

**with better results and greater satisfaction than they had from any other orthochromatic plates**

***FOR ALL PHOTOGRAPHIC WORK WHERE COLOR IS CONCERNED OUTDOORS OR INDOORS, IN PORTRAITURE, COPYING, LANDSCAPES AND INTERIORS***

**Positively the best orthochromatic plates in the market. Sensitive to the entire spectrum; giving brilliant negatives; simple in manipulation. A trial will convince**

TWO SPEEDS **C. D.** "FAST" "MEDIUM"

Obtainable from dealers or direct from factory. Send for price-list and special circular

LOVELL DRY PLATE MFG. CO.

NEW ROCHELLE, N. Y.

Western Depot: 64 Wabash Ave., Chicago. Denver: HART BROS. & WELLS.

LEARN

# Photography

FROM

## PRIZE WINNERS

**18 Awards in America and Europe**

**ADDRESS DEPT. C FOR ILLUSTRATED CATALOG**

**The Guerin College of Photography**

**ST. LOUIS, MO.**

## *Lighting and Posing*

### *Taught by Mail*

according to old and new school methods. Instruction and criticisms strictly personal and private. The course includes illustrated lectures, showing actual conditions under the light.

Tuition fees guarantee graduation without regard to the time required in qualifying for diploma.

**Complete or partial training in every branch of professional or amateur photography, crayon, pastel, water colors and miniatures.**

**ILLUSTRATED PROSPECTUS upon request, stating subject in which interested.**

***AMERICAN SCHOOL OF... ART AND PHOTOGRAPHY***

***Incorporated.*** ***Box 2001, Scranton, Pa.***

# T T

# PLATINOTYPE

**Is our latest rough surface paper, in black and sepia. It is delightful to work, and the surface is of that quality which preserves the finest details; prints quickly, with a clear image and develops a picture of great brilliance and beauty.**

**Sample T T black (by mail) 25 cents**

**Sample T T sepia " " 35 cents**

**Our other papers, AA, BB and CC, continue to be indispensable to those artistic workers who *must have the best.* Send for pamphlet.**

WILLIS & CLEMENTS

PHILADELPHIA

*The Standard Photographic Manual for Beginners and Experts*
*Simple instructions, practical formulas. 10th thousand now selling*

# Wilson's Quarter Century in Photography..

**Price, $4.00**
**.. Postpaid..**

BRIEFLY described, this book is a concise encyclopedic text-book of practical photography, covering 528 closely printed pages, and illustrated with 280 fine engravings, with a copious index. It gives a plain, unvarnished account of the theory and practice of all the modern applications of photography from A to Z. The plan of the book is unique; each chapter of the work presenting the theory of its subject in comparatively large type, while the experiences of practical workers are given on each page in supplementary notes, small print. The amount and value of the information thus made available for the worker may be estimated from the fact that these notes are gathered from the writings of almost 300 photographic authorities and workers. *Quarter Century* is not a low-priced book, but it is certainly a *cheap* work to buy, as it saves after-expenditure.

CONTENTS

1. The History of Photography.
2. The Theory of Photography.
3. Light
4. The Camera.
5. About Lenses.
6. The Diaphragm, or Stop.
7. Glass-house Construction.
8. Under the Skylight.
9. The Application of Art Principles.
10. Outdoor Operations.
11. Exposure, or the Question of Time.
12. Concerning Chemicals.
13. Dark-room Contrivances.
14. Negative Making, Wet.
15. Negative Making, Dry.
16. Negative Making, Paper and Film.
17. Retouching and Doctoring the Negative.
18. Printing on Albumenized Paper.
19. Printing Drawbacks and Defects—Causes and Remedies.
20. Printing-room Particulars.
21. Peculiar Printing Processes.
22. Color-sensitive Photography—Isochromatic—Orthochromatic.
23. Photo-engraving and Pictorial Illustration.
24. Lantern Slides and Transparencies.

**TENNANT *and* WARD**
**287 Fourth Avenue, New York**

# EXPERTS

**Who have tried our Landscape and Portrait Orthochromatic Plates pronounce them equal in quality to the old-time "Wet Plates." No higher praise can be given a Dry Plate. They are also just right for the rendering of correct color values.**

**Order of your dealer or write us and we will see that you are supplied.**

**M. A. SEED DRY PLATE CO.**

ST. LOUIS, MO.
2005 Lucas Place.

NEW YORK, N. Y.
57 East Ninth St.

# Eastman Kodak Company

ROCHESTER, N. Y.

## QUALITY.

THE NO. 3 FOLDING POCKET KODAK DE LUXE.

The stamp of perfection is on the Folding Pocket Kodak de Luxe. Nothing that could add to the mechanical, optical or artistic quality of this instrument has been overlooked. It is a camera which appeals to every photographer through the perfect quality of lens, of shutter and of

*No. 3 Folding Pocket Kodak de Luxe.*

mechanism. Its richness of design and finish immediately distinguish it as in every way a superior instrument.

Equipped with the famous Bausch and Lomb Plastigmat lenses, which are the very embodiment of optical perfection, these cameras have a power which permits of practical snap-shot work under conditions which were once considered impossible. These lenses are the very highest product of the lensmakers' science. Technically speaking, they have an equivalent focus of 5 inches, a speed of *f*. 6.8 and are strictly anastigmatic.

The B. & L. Automatic shutter with which these instruments are equipped is in perfect keeping with the superb quality of the lens. It is always set and is operated by a pressure of the bulb or by touching the trigger. It gives automatic exposures from $\frac{1}{100}$ of a second to one second; it has the "bulb" exposure by which the shutter opens when the bulb is pressed and closes when the pressure is released and has the time action, one pressure of the bulb opening and another pressure closing the shutter. It is fitted with iris diaphragm stops with scale for openings Nos. 3, 4, 8, 16, 32, 64 and 128.

The No. 3 Folding Pocket Kodak de Luxe has brilliant finder, socket for tripod screw, and focusing scale and may be loaded in daylight for two, four, six or twelve exposures, 3¼ x 4¼ inches.

Though of the richest finish, removed from the conventional black, their appearance is refined and inconspicuous. The covering is of selected Persian Morocco, a leather with a beautiful natural pattern in soft brown tints, shading off into creamy yellow, with here and there just a suggestion of sage green. The bellows are covered with brown silk and the exposed metal parts are of the finest nickel finish and brass and on each instrument is a solid silver name plate.

With each of these cameras we furnish a hand-sewed carrying case of Persian Morocco with silver plated trimmings.

These new instruments represent the very highest result of the lens makers' and camera makers' skill. Their superb finish is only typical of the perfect quality in lens, in shutter and in construction.

# Eastman Kodak Company

ROCHESTER, N. Y.

### THE PRICE.

| | |
|---|---|
| No. 3 Folding Pocket Kodak de Luxe, with No. 1 Plastigmat lens, B. & L. Automatic Shutter and Carrying Case (not loaded), . . | $75.00 |
| Transparent Film Cartridge, 12 exposures, 3¼ x 4¼, . | .70 |
| Do., 6 exposures, . . | .35 |
| Do., "Double-Two" Cartridge (4 exposures), . | .25 |

## FOR CHRISTMAS.

When they are not taking pictures it is only fair to assume that photographers—professional or otherwise—are very much like other folk. Christmas to them means the gladsome season when presents are exchanged, when all hearts are, or should be, light and when merriment reigns. And as the Christmas day approaches, photographers, like other people, are sorely vexed as to what to give as a present to this, that and the other one. The children, of course, come in for the first consideration. Well, what better for them than a Brownie Camera or a Kodak?

*No. 2 Brownie.*

The new No. 2 Brownies are wonderfully capable little instruments. They really lack nothing that is essential to good picture making. If they did we would not waste valuable space in advertising them in photographic magazines which reach people of experience in such matters. These little cameras load in daylight with our film cartridges for six exposures and make pictures 2¼ x 3¼ inches. They have meniscus lenses of 4½ inch focus, the Eastman Rotary shutter such as has been and is so successfully used on the Bulls-Eye Kodaks, have sets of three stops, two finders, are strongly made, covered with imitation leather and have nickeled fittings. Size of camera, 3¼ x 4 x 5⅝ inches; weight, 13 ounces. Any school boy or girl can quickly learn to make good photographs with a Brownie Camera. The boys and girls have accomplished splendid work with the No. 1 Brownie; the No. 2 Brownie widens the field and will mark a step in advance for tens of thousands of young people who entered photography with that wonderful little dollar instrument. Ten years ago as practical and satisfactory an instrument as the No. 2 Brownie could not have been purchased for less than twenty-five dollars. The Brownie Cameras at one and two dollars each are only made possible by our constant experimental work and by the special machinery which enables us to turn them out by the hundreds of thousands.

| | |
|---|---|
| No. 2 Brownie Camera, for 2¼ x 3¼ pictures (not loaded), . . . . | $2.00 |
| Transparent Film Cartridge, 6 exposures, 2¼ x 3¼, . | .20 |
| No. 2 Brownie Carrying Case, | .75 |

**Put them on your Christmas list.**

**The combined orthochromatic and non-halation qualities of Kodak Films make them superior to glass plates for winter landscape work.**

# Eastman Kodak Company

ROCHESTER, N. Y.

## THE No. 2 STEREO KODAK.

Since its inception stereoscopic photography has had many enthusiastic devotees. That there is wonderful depth and beauty in *properly made pictures* viewed through the stereoscope cannot be gainsaid. The introduction of the Stereo Kodak puts into the hands of the amateur the means of making optically correct stereoscopic pictures, while the instruction book which will accompany each instrument covers not only the usual ground of manipulating the camera, developing, etc., but gives detailed instructions in properly printing and mounting stereo work.

These instruments may be said to resemble in model the well known Bulls-Eye cameras, but are equipped with twin Rapid Rectilinear lenses and a modification of our automatic shutter. They use the standard size No. 2 Kodak Cartridges which may be obtained the world over, and they may be loaded for one, two, three or six stereoscopic pictures. By a simple blind, which cuts off the light from one of the lenses, they may also be used for single exposures, in which case the pictures are the same in size as those made with a No. 2 Bulls-Eye Kodak, 3½ x 3½ inches.

The Stereo Kodaks have sets of three stops, square, brilliant finder, spirit level, socket for tripod screw, are covered with fine seal grain leather and have heavily nickeled fittings. They are simple and accurate; they give correct stereoscopic effects and are high grade in every particular.

Those who are familiar with stereoscopic work will readily appreciate the advantages of film over plates, especially where a large number of prints is to be made. With plates it is necessary to cut every pair of prints apart; trim and transpose them before mounting. With film the negatives may be cut apart and transposed and any number of prints then made from them on die cut paper—the trimming and transposing of prints being entirely done away with.

For standard size (3½ x 6 in.) stereoscopic pictures or single exposures, 3½ x 3½ inches; capacity, 6 stereoscopic or 12 single exposures without reloading; size of Kodak, 4¾ x 6 x 8⅛ inches; weight, 2 lbs., 3 ozs.; length of focus of lenses, 4¾ inches.

| | |
|---|---|
| No. 2 Stereo Kodak, fitted with pair of rapid rectilinear lenses, not loaded, . . | $15.00 |
| Transparent Film Cartridge, 6 stereo exposures (Regular No. 2 Bulls-Eye 12 ex. cart.), . . . . | .60 |
| Do., 3 exposures (No. 2 B. E. 6 ex. cart.), . . . | .30 |
| Do., 2 exposures, (No. 2 B. E. "Double-Two" Cart.), . | .20 |
| Black Sole Leather Carrying Case with shoulder strap, . | 2.00 |

---

**Eastman's**

**Flash Sheets.**

**Clean—Convenient.**

# KLORO

The insoluble emulsion, the extra heavy basic stock (imported, of course,) and the soft richness of the prints are distinctive Kloro features, which place it above all other photographic papers.

Sold by all stock dealers.

THE PHOTO-MATERIALS CO.

ROCHESTER, N. Y.

A L B U M A

The highest quality of work, the greatest brilliancy of tone and gloss, combined with the richest depths of color and the softest gradations in the half-tones can only be obtained by the use of Albuma Paper.

It has a quality all its own.

*All dealers sell Albuma.*

NEW JERSEY ARISTOTYPE CO.

NEPERA PARK, N. Y.

Formerly of
Bloomfield, N. J.

# VELOX

## Prints in any Light

yet requires no dark-room for development. Gives pure black and white prints of surpassing depth and richness.

## SIMPLE, CERTAIN.

NEPERA CHEMICAL CO.

Division of the General Aristo Co.

For sale by all dealers.

NEPERA PARK, N. Y.

ROSS, ZEISS, GOERZ,

# PHOTOGRAPHIC LENSES

**For Professional and Amateur Work**
**. . . . in the Studio and Field . . . .**

**The Most Perfect Lenses, in Light and Elegant English Mountings**

**An Absolutely Unrivalled Selection**

**Field, Studio, and Hand Cameras, and Science and Enlarging Lanterns**

For every possible requirement of the Amateur or Professional Photographer or Process Worker. Catalogues and Estimates Free.

ROSS, Ltd. Manufacturing Opticians, (Established 1830.)

**111 NEW BOND STREET, LONDON, W.**

**Awarded the Grand Prix and a Gold Medal, Paris, 1900**

# WILSON'S PHOTOGRAPHIC MOSAICS, 1901

Contains 80 full-page engravings, reproducing selected examples of work by leading American photographers. A REVIEW OF PHOTOGRAPHIC PROGRESS, giving facts and formulæ, methods and processes. FIVE PRACTICAL MONOGRAPHS ON Platinotype and Carbon Printing, Plain Paper Printing, Studio Construction, and Outdoor Portraiture, with other helpful papers.

PRICE, PAPER COVERS, POSTPAID, 50 CENTS
ONLY A FEW COPIES TO BE HAD

EDW. L. WILSON, 287 FOURTH AVE., NEW YORK

# Instantaneous Exposures

THE CLEANEST
MOST UNIFORM AND RELIABLE PLATE
ON THE MARKET

# HAMMER EXTRA FAST PLATE

CONCEDED BY ALL
TO BE THE RIGHT
SPEED

## HAMMER DRY PLATE CO.

ST. LOUIS, MO.

**Send for Hammer's Little Book—A Short Talk on Negative Making, mailed free to any address**

## PRINCE'S ARISTOTINT

**"The Color Wonder"**

One box of eight colors will answer for one thousand pictures. These colors are without their equal for coloring photographs, maps, drawings, newspaper and magazine pictures. Endorsed by photographers and architects in all parts of the country; any child can use them. None genuine unless "PRINCE'S ARISTOTINT" blown in the bottle. **Price, 50c. per set of 8 colors; Postage 15c. extra.** Full directions in every box.

*For sale by all photo supply houses.*

**L. M. PRINCE & BRO., Trade Agents**
**108 West Fourth Street, CINCINNATI, O.**

***The Manufacturer or Merchant . . .***

who seeks business from professional photographers of the best class, practical workers who want the best goods regardless of price, *can reach more of them in*

***Wilson's Photographic Magazine***

than in any other American photographic journal. The best advertisers have proved this.

# Advertise your work—

## it will bring big business to your studio.

**You can do it, too, with only a little effort.**

Just let the people of your place learn you're the leader in your line by using bright, fresh, newsy, interesting ads. in the daily and weekly newspapers—(*they are the best mediums*).

**THE MARSHALL AD. CO.** will furnish you with sound, sensible, well-written, well displayed ads that bring business. Read on—

**MR. C. P. MARSHALL,** whose personal skill goes into every ad., is a practical and artistic photographer of years' experience, which gives him peculiar power to present the strongest possible arguments!

**50 CENTS PER WEEK**

Will give you regular, up-to-date weekly service. **Write to-day** and secure his skill for *your* studio. Don't wait till your competitor comes out in convincing colors and captures the cream of trade. Remember, only one studio in a place is furnished with the **MARSHALL AD** service. Let it be *yours*, and send **now** for plan for promoting *your* business, whether in city, town, or village!

**MARSHALL AD. CO., Ten Eyck Blk., Sec. L. Cazenovia, N. Y.**

# ROTOGRAPH SPECIALTIES

**Bromide Paper . . . . .**

A, B, C, D, E and I (Imperial) grades, comprising the finest line of bromides manufactured. Sample package, 10 cents postpaid.

**Negative Paper . . . . .**

A substitute for films and glass plates. A XX Century product. Sample half-dozen, 8 x 10, 60 cents postpaid.

**Post-cards . . . . . .**

Sensitized on one side and printed according to law on the other, matt and glossy, 20 cents a dozen postpaid.

**Iron-Citrate Developer**

The very best. Dissolve in four times its bulk of water and use,—that's all. 1 lb. tin, 50 cents; ½ lb., 25 cents; ¼ lb., 15 cents.

**Bromide Monthly . . .**

A Magazine of Information on Bromide Photography, with special reference to Rotograph products. Sample copy, 2c. stamp.

**"ROTOGRAPH"**

B. RUSSEGGER
E. S. MAPES } SELLING AGENTS { 101 FIFTH AVE. NEW YORK

# Anti-Trust.

MONARCH MATTE.

MONARCH GLACE.

## *PURE COLLODION PAPERS.*

**RELIABLE. UNIFORM. PERMANENT.**

**Three Times Quicker Printing Than Any Other.**

**PRICES SAME AS OTHER COLLODION PAPERS**

**MANUFACTURED ONLY BY THE**

# Monarch Paper Cempany.

*E. & H. T. ANTHONY & CO.,*
*SOLE TRADE AGENTS,*

*122-124 FIFTH AVENUE,*
*NEW YORK.*

# ANTI-TRUST.

## *Every Progressive Professional should have these two Books*

## FLASHLIGHT PHOTOGRAPHY

BEING No. 29 of The Photo-Miniature Series, tells the story of flashlight photography from A to Z. Every detail is plainly and simply covered; various flash-lamps and the most reliable powders; how to handle them; their successful use in making portraits equal to the best professional work; groups; children; bust and figure poses of men and women; silhouettes and fancy pictures; interiors, etc., with full instructions on the making of one's own apparatus at a slight cost; and many diagrams telling just how the illustrations of the number were made. The amount of powder to be used; the placing of light, camera and subject, and the development of negatives made by flashlight. The most complete and useful book on the subject.

*PRICE 25 CENTS*

## PHOTOGRAPHING INTERIORS

BEING No. 30 of The Photo-Miniature Series, covers in a practical way all the classes of interior photography likely to be encountered by amateur and professional photographers—from the best parlor to the machine shop or great cathedral. There has long existed a need for a little book such as is here announced—gathering into one place, for convenient reference, all the points and difficulties met with in photographing interiors. Definite formulæ and instructions are given, and the information includes both daylight and flashlight work, with beautiful illustrations.

The monograph includes a description of a common sense flash machine, whereby all reflections are avoided, and diffused, soft lighting of an interior may be obtained.

*PRICE 25 CENTS*

**Send for a complete descriptive list of *The Photo-Miniature Series*, and *Book List* comprising 150 of the best books on photography**

***TENNANT & WARD, Publishers***

***287 Fourth Avenue*** ***New York***

A DELIGHTFUL GIFT-BOOK
FOR ALL PICTURE LOVERS

Profusely illustrated with fine engravings reproducing 53 of the world's famous paintings from various countries and schools of painting. Printed on art paper and attractively bound

# HOW TO ENJOY PICTURES

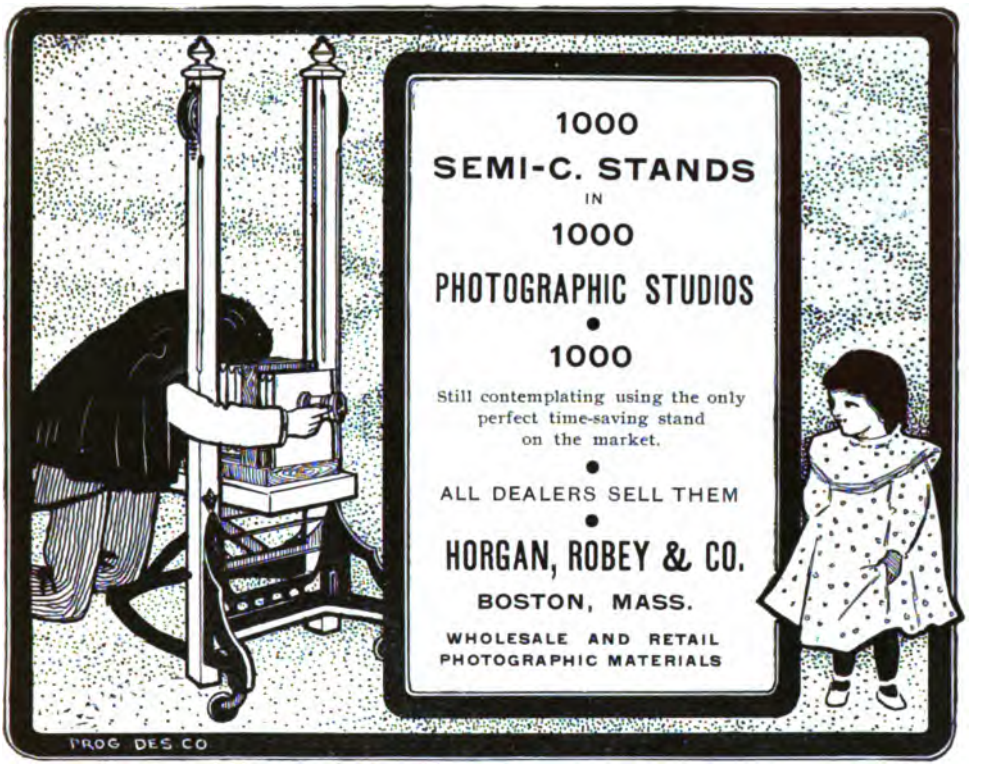
By MABEL S. EMERY

This sumptuous book has been praised by the leading reviews not only for its beauty, but chiefly for its interesting information.

It tells in plain and simple language how to understand pictures and enjoy them, the qualities which make them great, and what should be looked for in pictures. No other book so well fills this peculiar field. Thousands of copies have been sold for the enjoyment of all who love good pictures. It is a book to be read and studied over and over, full of profitable hints and helps.

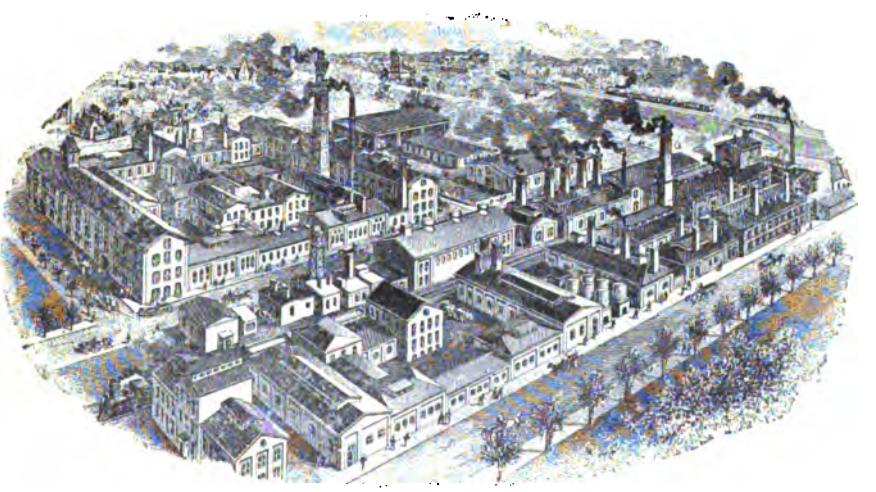
FIFTH EDITION NOW READY: 287 PAGES
PRICE, $1.50, POST-FREE

EDWARD L. WILSON, 207 FOURTH AVE., NEW YORK.




# CHARLES COOPER & CO.

**Manufacturing Chemists** (ESTABLISHED 1857) **194 Worth Street, New York**



**WORKS AT NEWARK, NEW JERSEY.**

**PHOTO CHEMICALS, REFINERS OF PHOTOGRAPHIC WASTE**

Aqua Ammonia: C. P. and Commercial Acids, Bromides and Iodides; Soluble Cotton for Collodion; C. P. Chlor. Gold Chlor. Platinum; Sulphate Iron; Acid Sulphite Soda Solution; Sulphite Soda, crystals and granular; Ethers; Photographic Alcohol; Nitrate Silver; Litmus Paper, etc., etc.

**MONTHLY PRICE LIST ISSUED.**

# J. Hauff's Ready Tubes

**Save Money, Time and Trouble**

**ORTOL TUBES** Sample Set **35c.**

A two solution developer for plates, papers, and films.....

**PYROL TUBES** Sample Set **25c.**

The best two-solution pyrogallic acid developer

# J. HAUFF'S PATENTED..... DEVELOPERS

***METOL—ORTOL—ADUROL—GLYCIN—PYROL***

**.....BE SURE TO USE.....**

# G. G. Chemically Pure Sodas

Can you afford to take any chances with expensive and difficult exposures? No! You require the purest chemicals. Washing soda and inferior sulphites will not make a proper developer. Take no chances, but use.....

| | | | | | |
|---|---|---|---|---|---|
| **G. G. CARBONATE OF SODIUM** | anhyd. | C. P.— | 1 lb. | bottle, | 25c. |
| **G. G. SULPHITE OF SODIUM** | " | " | 1 lb. | " | 30c. |
| **G. G. CARBONATE OF POTASSIUM** | " | " | 1 lb. | " | 35c. |

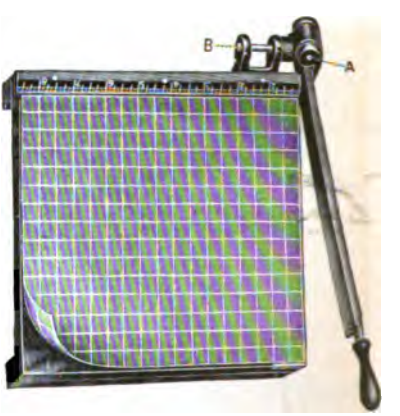
all are of double strength.

# Stevens Print Trimmer

## Special Features:

**Swinging knife which insures constant contact and clean, clear edges.**

**Transparent guide sheet to bring edges parallel to any of the lines in picture.**




**8-1/2 in. knife . . $3.00**

NEW CATALOGUE JUST OUT

Copy for 10 cents in stamps

# G. GENNERT, 24-26 E. Thirteenth St. NEW YORK.

# The Fastest Anastigmat

If you are doing high speed work. Or working under poor light, you require the . . . . .

HIGHEST
OBTAINABLE
SPEED

## YOU DO NOT WANT *f* 7.7

## YOU CAN DO BETTER THAN *f* 6.8

## YOU CAN GET *f* 5.6

IT'S OFFERED IN THE

# COLLINEAR LENS

SOLD BY ALL DEALERS

AT UNIFORM PRICES

The Voigtlænder & Son Optical Company

137 E,
WEST 23d STREET
NEW YORK

# JUST OUT

# A Plate Attachment

## FOR No. 3 FOLDING POCKET KODAK

**We also fit our celebrated DOUBLE ANASTIGMAT LENS to this Kodak, No. 3 Folding Pocket Kodak, with GOERZ LENS, Tib Automatic Shutter and Plate Attachment, with six holders, complete, $62.80 net cash.**

**PLATE ATTACHMENT AND SIX HOLDERS, $7.65 net.**

*Write for Catalogue and further information to your Dealer, or*

**C. P. GOERZ, OPTICAL WORKS, 52 East Union Square, NEW YORK.**

# Actien-Gesellschaft für Anilin-Fabrikation, Berlin, S. O.

Photographic Department.

Use

# RODINAL, Patent Developer.

**Does not produce fog or stain when development is forced.**
**The most effectual and economical developer extant.**
**Can be used over and over again until exhausted.**
**Is easily controlled with water.**
**Unequalled for Portraiture.**
**Unequalled for Landscapes.**
**Unequalled for Under Exposures.**
**Unsurpassed for Correct Exposures.**

Trade Mark

***For* Rapid Development. For Slow Development.**
**For Brilliancy. For Softness. For Detail. For Gradation.**
**For Bromide Paper. For Plates. For Lantern Slides.**

Diluted with twenty to thirty times its volume of water, it is ready for use.

| 3 oz. | 8 oz. | 16 oz. |
|---|---|---|
| $ 0.60 | 1.10 | 2.00 |

Mr. Leipper writes in the **British Journal of Photography** (28th December, 1900) as follows:

"**Rodinal** is the sodium salt of para-amido-phenol dissolved in a concentrated solution of sodium sulphite. It keeps very well, and is convenient in use, simply requiring dilution. **It is the most powerful developer known,** and is about the best for extreme under-exposure. **After having tried this developer, one is not inclined to develop under-exposures for two hours with a pyro-ammonia developer of strength one quarter-grain per ounce, when the same result is got in twenty minutes with Rodinal.**"

## Pamphlet on Developers (2d edition, 1900)

containing in 20 pages detailed description and instructions for use.

**Free on application**

through all dealers or through the following importers:

**E. & H. T. ANTHONY & CO.,**
122 & 124 Fifth Avenue, 17th and 18th Streets, NEW YORK.

**MALLINCKRODT CHEMICAL WORKS,**
ST. LOUIS, MO., and 90 William Street, NEW YORK.

**THE SCOVILL & ADAMS CO., OF NEW YORK,**
3 & 5 West 19th Street, NEW YORK.

**GEORGE MURPHY,**
57 East 9th Street, NEW YORK.

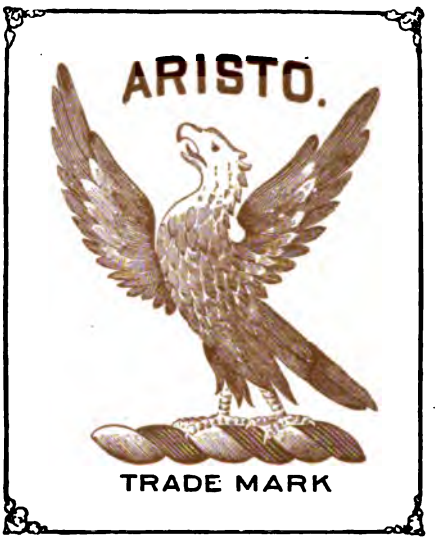
**G. GENNERT,**
24 and 26 East 13th Street, NEW YORK.

Eikonogen. ✱ Amidol.

Imogen. ✱ Diogen.

**Sold by all dealers.**

1889




1901

The Emblem of Permanency.

*ARISTO MOTTO.*

*"We believe permanency is the KEYSTONE of PHOTOGRAPHIC success, and all brands of paper bearing our TRADE-MARK are manufactured on this principle. We hold our consumer's reputation and success identical with our own. We surround both with every safeguard known to Chemical Science and our own experience."*

# AMERICAN ARISTOTYPE CO.,

Manufacturers of

***"Aristo" Papers and Supplies.***

JAMESTOWN, N. Y.

2424

THE BORROWER WILL BE CHARGED AN OVERDUE FEE IF THIS BOOK IS NOT RETURNED TO THE LIBRARY ON OR BEFORE THE LAST DATE STAMPED BELOW. NON-RECEIPT OF OVERDUE NOTICES DOES NOT EXEMPT THE BORROWER FROM OVERDUE FEES.

DUE FEB 1[illegible] '86 FA

CANCELLED
JUL 0 2 1986

FINE ARTS LIBRARY
3 2044 039 435 219

FA 16.100 (38) 1901

Wilson's Photographic Magazine

| DATE | ISSUED TO |
| --- | --- |
| 02 12 | OLD 0810 00 |
| | OFFICER MR. WILLIA |

NOT TO LEAVE LIBRARY